Engineering Library
TA
1
.E42

INDEX TO VOL. CLXXXVII

Names

A

A.C. CARS, Ltd., Southend Pier Electric Trains, 477
Airmec Laboratories, Ltd., Ionisation Voltage Tester, 407
Alexander, George H., Machinery, Ltd., Fine Boring Tool, 198
Allan, C. T., Fuel Utilisation, 131
Allan, W. A. M., Status of the Engineer, 219, 471
Allen, W. G., and Sons (Tipton), Ltd., Rotary Coupling for Mine Car, 528
Allen, W. H., Sons and Co., Ltd., Shipbuilding and Marine Engineering in 1948, 71; Gas Turbines in 1948, 110
Allen West and Co., Ltd., Southend Pier Electric Trains, 477; Repeater Fuses for Automatic Reclosure, 595
Allis-Chalmers Manufacturing Co., Technical Films, (145)
Allsop, H., Grain Growth in Silicon-Chromium Valve Steel, 522
Altus Engineering Co., Corsham, Ltd., Heavy Hobbing Press, 199
Aluminium Co. of Canada, Aluminium Plant Surveys, 28
American Car and Foundry Company, "A.F.C.-Talgo" Train, 644
Anglo-American Oil Co., Large Oil Refinery at Fawley, (651), 667
Anglo-Iranian Oil Co., Ltd., Antwerp Oil Refinery, (31)
Anglo-Saxon Petroleum Co., Ltd., Shipbuilding and Marine Engineering in 1948, 71; Electrical Engineering in 1948, 98
Angus, Robert L., Obituary, 219
Archer, S., Screwshaft Casualties—The Influence of Torsional Vibration and Propeller Immersion, 494
Ardler Junction Collision Report, 93
Armstrong Siddeley "Double Mamba" Propeller-Turbine Engine, 508
Asea Electric, Ltd., Frequency Correction Equipment for Railway Signalling Supplies, 184; Jubilee, 300
Ashford Common, Gas Turbines for the M.W.B. Pumping Station, 337
Ashmore, Benson, Pease and Co., Ltd., Johannesburg's New Gasholder, (315)
Asperen, F. G. van, More Diesel Varia, 451
Associated British Oil Engines, Ltd., Diesel Electric Power Plant for Isle of Man, (567)
Associated Commercial Vehicles, Ltd., Training of Apprentices, 342
Associated Equipment Co., Ltd., Pilot Injection for Oil Engines, 392
Associated Portland Cement Manufacturers Co., Coal Wharf at Swanscombe, 242
Auld, S. J. M., Principles of Diesel Lubrication, 536, 567
Austin, John, Retirement, 653
Austinlite, Ltd., Unattended Lighthouse Power Plant, 363
Automatic Coil Winder and Electrical Equipment Co., Ltd., AVO Heavy Duty Meter, 409
Automatic Telephone and Electric Co., Ltd., Vehicle-Actuated Traffic Signals at "Bank Complex," (543)
Aveling-Barford, Ltd., Half-Cubic Yard Dumper, 491
Avery, W. and T., Ltd., 30-Ton Universal Testing Machine, 533

B

BABCOCK AND WILCOX, Ltd., Catalagzi Power Scheme, Turkey, 100; Poole Power Station, 582
Bailey, E. G., Invention and Sifting Out Engineering Facts, 472, 498
Bakelite, Ltd., Machining Laminated Plastics, (455)
Balfour Beatty and Co., Ltd., New Tunnel at Woodhead, 252; Air Transport of Turbine Rotor to Kenya, (483)
Ball, Sir William, Employers' Liability in 1949, 418
Barker, A., Tungsten and Tungsten Carbide Powders, 467
Barnet Instruments, Ltd., Portable Pressure Gauge Calibrator, 672
Baron, H. G., Large Crystal Grain Size in Silicon-Chromium Valve Steel, 522
Barrel Arch Bridge, 8
Bartley, W. Coppen, Personnel Management and Works Managers, 50
Beacham, T. E., Hydraulic Seals, 228
Belliss and Morcom, Ltd., New Steel Shop, 637
Bentham, Cecil, Productivity, 379
Bibby, J., and Sons, Ltd., Continuous Rotary Evaporator, 311
Birlec, Ltd., Rotary Gas Carbonising Furnace, 458
Blackburn, R. E., International Engineering Collaboration, 163
Blackburn, Starling and Co., Ltd., Modernised Ship Model Testing Tank, 580
Blackwood, John, Hodge and Co., Ltd., Large Excavator Bucket, 312
Blair, R., Obituary, (515)
Blaw-Knox and Co., Ltd., Ready-Mixed Concrete Transport, 339; Concrete Pump, 556; Tower Testing Station, 564
Blazey, C., Flow of Metal in Tube Extrusion, 391
Blom, Christian, Sea Speed and Steering, 494
Bostock and Bramley, Ltd., Stephenson-Crossley Diesel Shunting Locomotive, 535
Boulton and Paul Aircraft, Ltd., "Balliol" Advanced Trainer, 584
Bournemouth and Poole Electricity Co., Ltd., Poole Power Station, 582
Boving and Co., Ltd., Electrical Engineering in 1948, 71
Bowden, F. P., Seizure of Metals, 395
Boydell, E., and Co., Ltd., Muir Hill Loader, 460
Brace, H. P., Semi-Automatic Floodgates on a 600ft Spillway, 509
Brackett, F. W., and Co., Ltd., Jubilee, (483); Poole Power Station, 582
Braidhurst Viaduct, Motherwell, (599)
Bramwell, F. H., Mechanical Engineering in the Chemical Industry, 618
Brand, Charles, and Son, Ltd., Coal Wharf at Swanscombe, 242
Brazilian Traction, Light and Power Co., Ltd., Development in Brazil, 153
Brecknell, Munro and Rogers, Ltd., Ministry of Supply Tour of the S.W., 419
Brecknell Willis and Co., Ltd., Modernised Ship Model Testing Tank, 578
Bristol Aeroplane Co., Ltd., Instrumentation on the "Brabazon I," 215; Bristol Aircraft Accident, 517; Helicopter Rotor Testing Tower, 685
Bristow, Whiston Alfred, Obituary, 359
British American Research, Ltd., Rotary Bellows Seal, 385
British Broadcasting Corporation, Micro-Wave Radio Link for Television Outside Broadcasts, (471)
British Columbia Electric Railway Co., Bridge River Hydro-Electric Station, 285
British Electricity Authority, Electrical Engineering in 1948, 41, 69, 98; Easter and Summer Schools, 1949, (63); Enquiry Bureau, (91); Power Station Fuel Ash and Land Reclamation, 103; Conferences of Power Station Superintendents, 149, 226; Grit Arresting Plant for Fulham Power Station, 227; Willesden Grid Sub-Station, (242); Regional Safety Officers, (287); Easter School, (371); Standard Electricity Bulk Supply Tariff, (371); Stephenson-Crossley Diesel Shunting Locomotive, 535; Plant and Equipment, (543); Tower Testing Station, 564; Poole Power Station, 582; Some Operating Results at British Power Stations, 585
British European Airways Corporation, Edinburgh (Turnhouse) Airport, (63); Planned Transport to London Airport, (455)
British Gas Council, Gas-Fired Immersion Heating and Galvanising Bath, 493
British Insulated Callender's Cables, Ltd., Catalagzi Power Scheme, Turkey, 100; Electrical Engineering in 1948, 124; A 220-kV Impregnated Pressure Cable Installation, 310; Fault Locator, 527; Ex-Apprentices, (625); Farm Wiring System, (677)
British Jeffrey-Diamond, Ltd., "Flexi-tooth" Crusher, 462
British Oil Burners, Ltd., Automatic Thimble-Tube Boiler, 595
British Overseas Airways Corporation, Resignation of Sir Harold Hartley, 65; Amalgamation with B.S.A.A., 289
British Oxygen Co., Ltd., Welding Prize, (175); Ceramic Hood "Argonaro" Torch; "Cutogen" Hand Cutter, 487
British Paints, Ltd., Colour Conscription, (343)
British Reinforced Concrete Engineering Co., Ltd., Rebuilding Reinforced Concrete Shed at Liverpool, 77
British South American Airways, Amalgamation with B.O.A.C., 289
British Thomson-Houston Co., Ltd., Electrical Engineering in 1948, 69, 98, 124; Shipbuilding and Marine Engineering in 1948, 71; Summer School in Electrical Engineering, (75); Gas Turbines in 1948, 81; Control Room Lighting, 227; Fluorescent Street Lighting in Denmark, 227; Halogen Leak Detector, 408; Oil Circuit Breaker, 463
British Transport Commission, Receipts, (63), (203), (571); Deputy Chairman, 161; Chief Research Officer, 517
Broad, L., Flow of Metal in Tube Extrusion, 391
Bronx Engineering Co., Ltd., A Guillotine Shear, 541
Brookhirst Switchgear, Ltd., Stabilising System for Electric Machines, 168
Browett, A. H., Obituary, (625)
Brown Boveri and Co., Ltd., Gas Turbine Locomotives for British Railways, 25; Gas Turbines in 1948, 127; Manufacture of Power Station Equipment at West Hartlepool, 594
Brown, F. A. S., Standardisation of Locomotives, 135, 332, 417, 502
Brown, John, and Co., Ltd., Shipbuilding and Marine Engineering in 1948, 71; Gas Turbines in 1948, 81; 100-kW Windmill Generator for Orkney, 457
Brush Electrical Engineering Co., Ltd., Electrical Engineering in 1948, 69; Gas Turbines in 1948, 110; Gas Turbines for Ashford Common Pumping Station, 337
B.S.A. Cycles, Ltd., Railway Truck Mover, 510
Budd, William C., Locomotive Performance, 696
Bullows, A., and Sons, Ltd., Water Wash Spray Booth, Paint Spray Booth, 461
Burden, H., Tungsten and Tungsten Carbide Powders, 467
Butcher, S. J., Employers' Liability in 1949, 618
Bygate, P. W., Grain Growth in Silicon-Chromium Valve Steel, 522

C

CALDERWOOD, James, New Appointment, 93
Cameron, A., Surface Roughness of Bearing Surfaces and its relation to Oil Film Thickness at Breakdown, 540
Campbell, Sir Malcolm, Obituary, 15
Campbell, Norman Robert, Obituary, 641
Campion, A., Meeting High-Performance Demands in Engineering Construction with Meehanite Metal, 243
Canadian General Electric Co., New Power Project, 338
Canadian Industries, Ltd., Cellophane Plant Extensions, 28; Sulphuric Acid Project, 513
Canadian Locomotive Co., Locomotives for India, 513
Canadian Pacific Railway Co., Last Steam Locomotive, (455)
Canadian Unitcast Steel, Ltd., Quebec Steel Plant Expansion, 285
Canadian Vickers, Ltd., Ship for South America, 513
Canadian Western Timber Co., Power Plant in British Columbia, 513
Candy Filter Co., Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Canso Bridge Project, 513
Carlisle, S. S., Electrical Pressure Meter for the Measurement of Open-Hearth Furnace Differential Pressures, 521
Catalagzi, Turkey, Power Scheme, 100
C.A.V., Ltd., Pilot Injection for Oil Engines, 392
Centrax Power Units, Ltd., Gas Turbines in 1948, 81
Chance-Londex, Ltd., Unattended Lighthouse Power Plant, 363
Chepstow Bridge, Trestling Under, 37
Chi, T. J., An Electronic Pressure Gauge, 320
Chloride Electrical Storage Co., Ltd., Fast Charging of Car Batteries, 167
Church Fenton Junction, Before Renewal, 8
Cinema Television, Ltd., Universal Oscilloscope, 385
Claerwen Dam, Site and Cableways, 50
Clarkson Thimble Tube Boilers, Ltd., Automatic Thimble-Tube Boiler, 595
Clay, Stanley Richard, Obituary, 135
Clayton, D., Dirt in Lubricants, 136
Clear Glass Products, Ltd., Protective Coating, (427)
Clerke, A. B. H., Obituary, 559
Clifford, C. F., Magnetic Escapements for Pendulum Clocks, 116
Clifford Cab Co., Radio-Telephone for Taxi-Cab Fleet, 371
Climie, Andrew, Obituary, (543)
Cohen, J. E., Obituary, (543)
Coiregrogain Quarry, Civil Engineering in 1948, 19
Collingham, R. H., Retirement, 1
Congo River, Widening, 63
Consolidated Mining and Smelting Co., Haulageway Project, Large Rod Mill, 513
Cooke, B., Overheating in Rotary Seals, 223; (Letters, 248, 417)
Cooke and Ferguson, Ltd., Metal-Clad Single-Break Switchgear, 591
Cooper, A. R., Obituary, 304
Cooper Wettern and Co., Ltd., South Bank Thames River Wall, 85
Corlett, E. C. B., Light Alloy Cross-Channel Ship Design, 465
Costain, Richard, Ltd., South Bank Thames River Wall, 85
Couling, S. A., Helical Gears Cut on "Solid Table" Machines, 430, 580
Coventry Gauge and Tool Co., Ltd., Internal Micrometer, 312; Screw Pitch Checker, 698; Slip Gauges for Checking Micrometers, 698
Cowans, Sheldon and Co., Ltd., A 150-Ton Floating Crane, 193; Poole Power Station, 582
Cox and Danks, Ltd., Welded Joints in Structural Steelwork, 651
Crampton, A. W., Theses, 136; Status of the Engineer, 276
Crockett, J. H. A., Dynamic Principles of Machine Foundations and Ground, 411, 440
Crompton Parkinson, Ltd., Resilient Tramcar Wheels, 367; Southend Pier Electric Trains, 477
Currey, I. A., Status of the Foreman, 50

D

DALLOW Lambert and Co., Ltd., Polishing Machine Hood, 672
Daniel, G., Safety of Life at Sea, 410
Davey, Norman, Obituary, 667
Davey, Paxman and Co., Ltd., Appointments, 653
Dawe Instruments, Ltd., Watch Rate Recorder, 409
Dawson, Oliver, Gants Hill Station, London Transport, 234
Day, Charles, Obituary, 697
De Havilland Aircraft Co., Ltd., "Vampire" Fighters to be Built in Switzerland, (203); Aircraft Servicing School, (287)
Decca Navigator Co., Ltd., Decca Navigator System with Lane Identification, 101; Chain for Oil Survey, (287)
Denbigh Hall, British Railways in 1948, 36
Denny, William and Brothers, Ltd., Motorship for Isle of Wight Service, (703)
Diamond, E. L., Open-Hearth Furnace Charging, 548
Dibben, C. R., Oil Seals, 357
Dominion Engineering Co., Ltd., New Power Project, 338
Dominion Engineering Works, Ltd., Locomotive Diesel Engine Manufacture in Canada, 385
Dorman, Long and Co., Ltd., Large All-Welded Girders, 144
Dorman, Long (Africa), Ltd., Johannesburg's New Gasholder, (315)

Engineering Library
TA
1
.E42

INDEX TO VOL. CLXXXVII

Names

A

A.C. CARS, Ltd., Southend Pier Electric Trains, 477
Airmec Laboratories, Ltd., Ionisation Voltage Tester, 407
Alexander, George H., Machinery, Ltd., Fine Boring Tool, 198
Allan, C. T., Fuel Utilisation, 131
Allan, W. A. M., Status of the Engineer, 219, 471
Allen, W. G., and Sons (Tipton), Ltd., Rotary Coupling for Mine Car, 528
Allen, W. H., Sons and Co., Ltd., Shipbuilding and Marine Engineering in 1948, 71; Gas Turbines in 1948, 110
Allen West and Co., Ltd., Southend Pier Electric Trains, 477; Repeater Fuses for Automatic Reclosure, 595
Allis-Chalmers Manufacturing Co., Technical Films, (145)
Allsop, H., Grain Growth in Silicon-Chromium Valve Steel, 522
Altus Engineering Co., Corsham, Ltd., Heavy Hobbing Press, 199
Aluminium Co. of Canada, Aluminium Plant Surveys, 28
American Car and Foundry Company, "A.F.C.-Talgo" Train, 644
Anglo-American Oil Co., Large Oil Refinery at Fawley, (651), 667
Anglo-Iranian Oil Co., Ltd., Antwerp Oil Refinery, (31)
Anglo-Saxon Petroleum Co., Ltd., Shipbuilding and Marine Engineering in 1948, 71; Electrical Engineering in 1948, 98
Angus, Robert L., Obituary, 219
Archer, S., Screwshaft Casualties—The Influence of Torsional Vibration and Propeller Immersion, 494
Ardler Junction Collision Report, 93
Armstrong Siddeley "Double Mamba" Propeller-Turbine Engine, 508
Asea Electric, Ltd., Frequency Correction Equipment for Railway Signalling Supplies, 184; Jubilee, 300
Ashford Common, Gas Turbines for the M.W.B. Pumping Station, 337
Ashmore, Benson, Pease and Co., Ltd., Johannesburg's New Gasholder, (315)
Asperen, F. G. van, More Diesel Varia, 451
Associated British Oil Engines, Ltd., Diesel Electric Power Plant for Isle of Man, (567)
Associated Commercial Vehicles, Ltd., Training of Apprentices, 342
Associated Equipment Co., Ltd., Pilot Injection for Oil Engines, 392
Associated Portland Cement Manufacturers Co., Coal Wharf at Swanscombe, 242
Auld, S. J. M., Principles of Diesel Lubrication, 536, 567
Austin, John, Retirement, 653
Austinlite, Ltd., Unattended Lighthouse Power Plant, 363
Automatic Coil Winder and Electrical Equipment Co., Ltd., AVO Heavy Duty Meter, 409
Automatic Telephone and Electric Co., Ltd., Vehicle-Actuated Traffic Signals at "Bank Complex," (543)
Aveling-Barford, Ltd., Half-Cubic Yard Dumper, 491
Avery, W. and T., Ltd., 30-Ton Universal Testing Machine, 533

B

BABCOCK AND WILCOX, Ltd., Catalagzi Power Scheme, Turkey, 100; Poole Power Station, 582
Bailey, E. G., Invention and Sifting Out Engineering Facts, 472, 498
Bakelite, Ltd., Machining Laminated Plastics, (455)
Balfour Beatty and Co., Ltd., New Tunnel at Woodhead, 252; Air Transport of Turbine Rotor to Kenya, (483)
Ball, Sir William, Employers' Liability in 1949, 418
Barker, A., Tungsten and Tungsten Carbide Powders, 467
Barnet Instruments, Ltd., Portable Pressure Gauge Calibrator, 672
Baron, H. G., Large Crystal Grain Size in Silicon-Chromium Valve Steel, 522
Barrel Arch Bridge, 8
Bartley, W. Coppen, Personnel Management and Works Managers, 50
Beacham, T. E., Hydraulic Seals, 228
Belliss and Morcom, Ltd., New Steel Shop, 637
Bentham, Cecil, Productivity, 379
Bibby, J., and Sons, Ltd., Continuous Rotary Evaporator, 311
Birlec, Ltd., Rotary Gas Carbonising Furnace, 458
Blackburn, R. E., International Engineering Collaboration, 163
Blackburn, Starling and Co., Ltd., Modernised Ship Model Testing Tank, 580
Blackwood, John, Hodge and Co., Ltd., Large Excavator Bucket, 312
Blair, R., Obituary, (515)
Blaw-Knox and Co., Ltd., Ready-Mixed Concrete Transport, 339; Concrete Pump, 556; Tower Testing Station, 564
Blazey, C., Flow of Metal in Tube Extrusion, 391
Blom, Christian, Sea Speed and Steering, 494
Bostock and Bramley, Ltd., Stephenson-Crossley Diesel Shunting Locomotive, 535
Boulton and Paul Aircraft, Ltd., "Balliol" Advanced Trainer, 584
Bournemouth and Poole Electricity Co., Ltd., Poole Power Station, 582
Boving and Co., Ltd., Electrical Engineering in 1948, 71
Bowden, F. P., Seizure of Metals, 395
Boydell, E., and Co., Ltd., Muir Hill Loader, 460
Brace, H. P., Semi-Automatic Floodgates on a 600ft Spillway, 509
Brackett, F. W., and Co., Ltd., Jubilee, (483); Poole Power Station, 582
Braidhurst Viaduct, Motherwell, (599)
Bramwell, F. H., Mechanical Engineering in the Chemical Industry, 618
Brand, Charles, and Son, Ltd., Coal Wharf at Swanscombe, 242
Brazilian Traction, Light and Power Co., Ltd., Development in Brazil, 153
Brecknell, Munro and Rogers, Ltd., Ministry of Supply Tour of the S.W., 419
Brecknell Willis and Co., Ltd., Modernised Ship Model Testing Tank, 578
Bristol Aeroplane Co., Ltd., Instrumentation on the "Brabazon I," 215; Bristol Aircraft Accident, 517; Helicopter Rotor Testing Tower, 685
Bristow, Whiston Alfred, Obituary, 359
British American Research, Ltd., Rotary Bellows Seal, 385
British Broadcasting Corporation, Micro-Wave Radio Link for Television Outside Broadcasts, (471)
British Columbia Electric Railway Co., Bridge River Hydro-Electric Station, 285
British Electricity Authority, Electrical Engineering in 1948, 41, 69, 98; Easter and Summer Schools, 1949, (63); Enquiry Bureau, (91); Power Station Fuel Ash and Land Reclamation, 103; Conferences of Power Station Superintendents, 149, 226; Grit Arresting Plant for Fulham Power Station, 227; Willesden Grid Sub-Station, (242); Regional Safety Officers, (287); Easter School, (371); Standard Electricity Bulk Supply Tariff, (371); Stephenson-Crossley Diesel Shunting Locomotive, 535; Plant and Equipment, (543); Tower Testing Station, 564; Poole Power Station, 582; Some Operating Results at British Power Stations, 585
British European Airways Corporation, Edinburgh (Turnhouse) Airport, (63); Planned Transport to London Airport, (455)
British Gas Council, Gas-Fired Immersion Heating and Galvanising Bath, 493
British Insulated Callender's Cables, Ltd., Catalagzi Power Scheme, Turkey, 100; Electrical Engineering in 1948, 124; A 220-kV Impregnated Pressure Cable Installation, 310; Fault Locator, 527; Ex-Apprentices, (625); Farm Wiring System, (677)
British Jeffrey-Diamond, Ltd., "Flexi-tooth" Crusher, 462
British Oil Burners, Ltd., Automatic Thimble-Tube Boiler, 595
British Overseas Airways Corporation, Resignation of Sir Harold Hartley, 65; Amalgamation with B.S.A.A., 289
British Oxygen Co., Ltd., Welding Prize, (175); Ceramic Hood "Argonaro" Torch; "Cutogen" Hand Cutter, 487
British Paints, Ltd., Colour Conscription, (343)
British Reinforced Concrete Engineering Co., Ltd., Rebuilding Reinforced Concrete Shed at Liverpool, 77
British South American Airways, Amalgamation with B.O.A.C., 289
British Thomson-Houston Co., Ltd., Electrical Engineering in 1948, 69, 98, 124; Shipbuilding and Marine Engineering in 1948, 71; Summer School in Electrical Engineering, (75); Gas Turbines in 1948, 81; Control Room Lighting, 227; Fluorescent Street Lighting in Denmark, 227; Halogen Leak Detector, 408; Oil Circuit Breaker, 463
British Transport Commission, Receipts, (63), (203), (571); Deputy Chairman, 161; Chief Research Officer, 517
Broad, L., Flow of Metal in Tube Extrusion, 391
Bronx Engineering Co., Ltd., A Guillotine Shear, 541
Brookhirst Switchgear, Ltd., Stabilising System for Electric Machines, 168
Browett, A. H., Obituary, (625)
Brown Boveri and Co., Ltd., Gas Turbine Locomotives for British Railways, 25; Gas Turbines in 1948, 127; Manufacture of Power Station Equipment at West Hartlepool, 594
Brown, F. A. S., Standardisation of Locomotives, 135, 332, 417, 502
Brown, John, and Co., Ltd., Shipbuilding and Marine Engineering in 1948, 71; Gas Turbines in 1948, 81; 100-kW Windmill Generator for Orkney, 457
Brush Electrical Engineering Co., Ltd., Electrical Engineering in 1948, 69; Gas Turbines in 1948, 110; Gas Turbines for Ashford Common Pumping Station, 337
B.S.A. Cycles, Ltd., Railway Truck Mover, 510
Budd, William C., Locomotive Performance, 696
Bullows, A., and Sons, Ltd., Water Wash Spray Booth, Paint Spray Booth, 461
Burden, H., Tungsten and Tungsten Carbide Powders, 467
Butcher, S. J., Employers' Liability in 1949, 618
Bygate, P. W., Grain Growth in Silicon-Chromium Valve Steel, 522

C

CALDERWOOD, James, New Appointment, 93
Cameron, A., Surface Roughness of Bearing Surfaces and its relation to Oil Film Thickness at Breakdown, 540
Campbell, Sir Malcolm, Obituary, 15
Campbell, Norman Robert, Obituary, 641
Campion, A., Meeting High-Performance Demands in Engineering Construction with Meehanite Metal, 243
Canadian General Electric Co., New Power Project, 338
Canadian Industries, Ltd., Cellophane Plant Extensions, 28; Sulphuric Acid Project, 513
Canadian Locomotive Co., Locomotives for India, 513
Canadian Pacific Railway Co., Last Steam Locomotive, (455)
Canadian Unitcast Steel, Ltd., Quebec Steel Plant Expansion, 285
Canadian Vickers, Ltd., Ship for South America, 513
Canadian Western Timber Co., Power Plant in British Columbia, 513
Candy Filter Co., Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Canso Bridge Project, 513
Carlisle, S. S., Electrical Pressure Meter for the Measurement of Open-Hearth Furnace Differential Pressures, 521
Catalagzi, Turkey, Power Scheme, 100
C.A.V., Ltd., Pilot Injection for Oil Engines, 392
Centrax Power Units, Ltd., Gas Turbines in 1948, 81
Chance-Londex, Ltd., Unattended Lighthouse Power Plant, 363
Chepstow Bridge, Trestling Under, 37
Chi, T. J., An Electronic Pressure Gauge, 320
Chloride Electrical Storage Co., Ltd., Fast Charging of Car Batteries, 167
Church Fenton Junction, Before Renewal, 8
Cinema Television, Ltd., Universal Oscilloscope, 385
Claerwen Dam, Site and Cableways, 50
Clarkson Thimble Tube Boilers, Ltd., Automatic Thimble-Tube Boiler, 595
Clay, Stanley Richard, Obituary, 135
Clayton, D., Dirt in Lubricants, 136
Clear Glass Products, Ltd., Protective Coating, (427)
Clerke, A. B. H., Obituary, 559
Clifford, C. F., Magnetic Escapements for Pendulum Clocks, 116
Clifford Cab Co., Radio-Telephone for Taxi-Cab Fleet, 371
Climie, Andrew, Obituary, (543)
Cohen, J. E., Obituary, (543)
Coiregrogain Quarry, Civil Engineering in 1948, 19
Collingham, R. H., Retirement, 1
Congo River, Widening, 63
Consolidated Mining and Smelting Co., Haulageway Project, Large Rod Mill, 513
Cooke, B., Overheating in Rotary Seals, 223; (Letters, 248, 417)
Cooke and Ferguson, Ltd., Metal-Clad Single-Break Switchgear, 591
Cooper, A. R., Obituary, 304
Cooper Wettern and Co., Ltd., South Bank Thames River Wall, 85
Corlett, E. C. B., Light Alloy Cross-Channel Ship Design, 465
Costain, Richard, Ltd., South Bank Thames River Wall, 85
Couling, S. A., Helical Gears Cut on "Solid Table" Machines, 430, 580
Coventry Gauge and Tool Co., Ltd., Internal Micrometer, 312; Screw Pitch Checker, 698; Slip Gauges for Checking Micrometers, 698
Cowans, Sheldon and Co., Ltd., A 150-Ton Floating Crane, 193; Poole Power Station, 582
Cox and Danks, Ltd., Welded Joints in Structural Steelwork, 651
Crampton, A. W., Theses, 136; Status of the Engineer, 276
Crockett, J. H. A., Dynamic Principles of Machine Foundations and Ground, 411, 440
Crompton Parkinson, Ltd., Resilient Tramcar Wheels, 367; Southend Pier Electric Trains, 477
Currey, I. A., Status of the Foreman, 50

D

DALLOW Lambert and Co., Ltd., Polishing Machine Hood, 672
Daniel, G., Safety of Life at Sea, 410
Davey, Norman, Obituary, 667
Davey, Paxman and Co., Ltd., Appointments, 653
Dawe Instruments, Ltd., Watch Rate Recorder, 409
Dawson, Oliver, Gants Hill Station, London Transport, 234
Day, Charles, Obituary, 697
De Havilland Aircraft Co., Ltd., "Vampire" Fighters to be Built in Switzerland, (203); Aircraft Servicing School, (287)
Decca Navigator Co., Ltd., Decca Navigator System with Lane Identification, 101; Chain for Oil Survey, (287)
Denbigh Hall, British Railways in 1948, 36
Denny, William and Brothers, Ltd., Motorship for Isle of Wight Service, (703)
Diamond, E. L., Open-Hearth Furnace Charging, 548
Dibben, C. R., Oil Seals, 357
Dominion Engineering Co., Ltd., New Power Project, 338
Dominion Engineering Works, Ltd., Locomotive Diesel Engine Manufacture in Canada, 385
Dorman, Long and Co., Ltd., Large All-Welded Girders, 144
Dorman, Long (Africa), Ltd., Johannesburg's New Gasholder, (315)

Eng. Lib.
Papon

Drysdale and Co., Ltd., Poole Power Station, 582
Dykes, Alfred Herbert, Obituary, 303

E

EAST Africa Power and Lighting Co., Ltd., Air Transport of Turbine Rotor to Kenya, (438)
Eastern and North-Eastern Region (British Railways), British Railways in 1948, 9; Resignalling at Doncaster, 73; Radio-Telephony at Whitemoor Marshalling Yard, 326; Sound Equipment at Liverpool Street Station, (484); Combined Restaurant-Buffet Cars, (618)
Edwards, F. J., Ltd., Multiple-Turret Punch, Section Bending Machine, 488
Electric Construction Co., Ltd., Frankley Waterworks, Birmingham, 215; Heavy Current, Low-Voltage Rectifiers, 528
Electric Furnace Co., Ltd., Box Type Cyclone Furnace, 492
Electronic Instruments, Ltd., Smoke Detector, 383
Elliott Brothers (London), Ltd., Potentiometer Recorder, 527
Engineering Diamonds, Ltd., A Diamond Truing Tool, (264)
English Electric Co., Ltd., Electrical Engineering in 1948, 98, 124; Gas Turbines in 1948, 109; Air Insulated Metalclad Switchgear, 170; Frequency Correction Equipment for Railway Signalling Supplies, 184; Southern Region Electric Locomotive "No. 20,003," 280; Gas Turbines for the M.W.B. Ashford Common Pumping Station, 337; Stator and Rotor Units, 528; Diesel-Electric Shunting Locomotives for Southern Region, 623; Long Non-stop Run of Diesel-Electric Locomotive "No. 10,000/1," 645
English Steel Corporation, Ltd., Hollow-Forged High-pressure Boiler Drum, 491
Entwistle, L. M., Damping Capacity of Metals, Damping Capacity of Alpha Brass, 390
Escher Wyss Engineering Works, Gas Turbines in 1948, 128
Euco Tools, Ltd., Tungsten Carbide Glass Cutter, (89); A Micrometer Jack, 144
Eve, J. L., Construction, Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Evershed and Vignoles, Ltd., Insulation Testers of Improved Range, 171; An Earth Impedance Tester, 338

F

FAIRFIELD Shipbuilding and Engineering Co., Ltd., A 150-Ton Floating Crane, 193
Falsterbo Canal, Repair of, (543)
Farrell, Lionel Randolph, Obituary, (625)
Fasideri Dam, Greece, 301
Fedden, Sir Roy, Appointment, 1
Fenner, J. H., and Co., Ltd., Small Flexible Couplings, (203)
Ferguson Brothers (Port-Glasgow), Ltd., Shipbuilding and Marine Engineering in 1948, 71
Ferranti, Ltd., Square Dial Instruments for Flush Panel Mounting, 171; Condensers for Power Factor Improvement, (315); 275-kV Outdoor Transformer Condenser Bushing, 528
Fieldon (Electronics), Ltd., Capacitance Proximity Relay, 364
Filettole-Livorno Aqueduct, Italy, 648
Financiere Belge des Petroles, S.A., Cie., Antwerp Oil Refinery, (31)
Findlay, Alexander and Co., Ltd., Poole Power Station, 582
Finney Presses, Ltd., 50-Ton Dual Transfer Press, 459
Firth-Brown Tools, Ltd., Carbide Tips and Tools, (315)
Firth of Forth, Tidal Model, 51
Firth, Thos., and John Brown, Ltd., Stephenson-Crossley Diesel Shunting Locomotive, 535
Fleming, A. P. M., Training of Technicians, 333
Flexibox, Ltd., Mechanical Seals for Refrigeration Compressors, (147)
Flux, John H., Status of the Engineer, 417, 502
Foster, Yates and Thom, Ltd., 250-Ton Plastic Press; Mixer, 486; Modernised Ship Model Testing Tank, 578
Fowell, George, Ltd., A 10-Cwt. Dumper, 567
Franco-Belge Co., Raismes Factories, 571
Frankau, A. M., Open-Hearth Furnace Charging, 548
Frankley Waterworks, Birmingham, 215
Fraser and Chalmers, Ltd., Ore Preparation Plant at Corby, 475
Freeman, Fox and Partners, South Bank of the Thames, (625)
French, W. and C., Ltd., Drainage of Permanent Way at Hougham, 324
Fulham Power Station, Grit Arresting Plant, 227
Fuller Electrical and Manufacturing Co., Ltd., Poole Power Station, 582

G

GANTS Hill Station, London Transport, 234
Gardner, G. A., The Future of Structural Engineering, 192
Garrard Engineering and Manufacturing Co., Ltd., Ministry of Supply Tour of the S.W., 419
Garry Scheme, North of Scotland Hydro-Electric Board, (259)
General Electric Co., Ltd., Lectures on Electronics in Industry, (91); Electrical Engineering in 1948, 98, 124; Fluorescent Lamp Fitting for Mines, (167); 9in Propeller Fan, 171; Frequency Correction Equipment for Railway Signalling Supplies, 184; Reed Vibrometer, 254; Carrier Current Communication on 110-kV Network, 255; An Australian Briquetting Plant, 284; Microphonic Burglar Alarm, (287); New Conduit Accessories in "Mazak" Alloy, (315); Extensions to Orlando Power Station, (371); Back Axle Testing Equipment, 422; Photo-Electric Photometer Colorimeter and Spectral Band Apparatus, 447; Blast-furnace Blowers for Rotherham, 469; Sound Equipment at Liverpool Street, Station, (484); Flameproof Electrical Equipment, 493
General Electric Co. of America, Power Station for Dragline Operation, 251
General Motors, Ltd., Service for "G.M." Diesel Engines, (232); Power Station for Dragline Operation, 251
General Refractories, Ltd., Research Laboratory for Refractories, 554
Gibb, Sir Claude, Britain's Energy—A New Conception, 137, 152
Gilbert-Ash, Ltd., Pre-stressed Concrete Pipes, 325
Glacier Metal Co., Machined Standard Bronze Bars, (315)
Glenfield and Kennedy, Ltd., Hydraulic Elevator Fish Pass, 354
Goldschmidt, H. J., Structure of Carbides in Alloy Steels, 523
Goodyear Tyre and Rubber Co., Riverlake Belt Conveyor, 395
Gosland, L., Consistency of Timing Obtained with Heavy Trigger-Released Mechanisms, 376, 402
Graham, E., Retirement, 651
Great Lakes Power Co., Ltd., Power Extension Project, 28
Greenwood, H. W., Powder Metallurgy and Heat-Resisting Alloys, 349
Greenwood, J. Neill, Metallurgical Research in Australia, 216
Gresham Transformers, Ltd., Automatic Voltage Regulator, 447
Grootenhuis, P., Powder Metallurgy and the Gas Turbine, 502
Guest and Chrimes, Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Gummer, W. S., Flow of Metal in Tube Extrusion, 391
Gwynnes Pumps, Ltd., One Hundred Years of Gwynnes Pumps, 662
Gyproc Products, Ltd., High-Temperature Insulating Material, 29

H

HACKING, Sir John, Visit to U.S.A., 205
Halcrow, Sir William, and Partners, Coal Wharf at Swanscombe, 242; New Tunnel at Woodhead, 252
Haldane, T. G. N., High-Voltage Transmission in Great Britain, 674, 699
Hallowes, A. P. C., Phosphorus-Deoxidised Coppers, 390
Hammond, R. E. R., Dynamic Principles of Machine Foundations and Ground, 411, 440; Vibration Controlled Foundations for Forging Hammers, 551
Harelawside Bridge, 8
Harland and Wolff, Ltd., Oil Pipe-line Pumps for Iraq, 266, 295
Harlow, W. F., Causes of Flue Gas Deposits and Corrosion in Modern Boiler Plants, 271
Hartley, Harry Sagar, Obituary, 248
Harvey, E. A., Obituary, (343)
Harvey, G. A., and Co. (London), Ltd., Thermal Storage Electric Generating Station, 306
Hattersley, Richard Edwin, Obituary, (543)
Hawthorn, R. and W., Leslie and Co., Ltd., Shipbuilding and Marine Engineering in 1948, 71
Hay, Douglas, Obituary, 247
Head, Wrightson Machine Co., Ltd., Triple Drawbench, 610
Headland, H., Tidal Power and the Severn Barrage, 141, 171
Hendon Dock, Civil Engineering in 1948, 53
Henleys, W. T., Telegraph Works Co., Ltd., Electrical Engineering in 1948, 124; Electricity Consumers' Control Units, (259); Distribution Pillars and Panels, 673
Herbert, Alfred, Ltd., Automatic with a Platen Slide, 423; Plastic Moulding Machines, 489; Automatic Camshaft Grinding Machine, 617; "Flashcap" Lathe, 699
Herrington, E. W., Locomotive Comparisons, 108
Hibbert, G. C., Obituary, (63)
Hill, W. Scott, River Navigation in the Sudan since 1898, 654, 680
Hodgkin, Charles Ernest, Obituary, 276
Hodgson, C. C., Large Crystal Grain-Size in Silicon-Chromium Valve Steel, 522
Holcroft, H., Standardisation of Locomotives, 192, 357
Holden and Brooke, Ltd., Small Circulating Pump, 284
Holland and Hannen and Cubitts, Ltd., "The Influence of Paint," (543)
Holloway Brothers (London), Ltd., Catalazzi Power Scheme, Turkey, 100
Hopkinsons Electric Co., Ltd., Motor Winding Impregnation, 284
Hordern, Mason and Edwards, Ltd., Power Press, 459
Horsfall, William, Obituary, (231)
Howes, W., Politics, Trade Unions and Work, 220
Hudson, A. A., Consistency of Timing Obtained with Heavy Trigger-Released Mechanisms, 376, 402
Hughes, F. O., Obituary, (703)
Hughes, Henry, and Son, Ltd., Periscopic Sextant, 408
Hunter, Sir Ellis, President of British Iron and Steel Federation, (126)
Hunting Aerosurveys, Ltd., "The World from the Air," 149; An Air Survey Exhibition, 187
Hydraulic Coupling and Engineering Co., Ltd., Stephenson-Crossley Diesel Shunting Locomotive, 535

I

IMPERIAL Chemical Industries, Ltd., Light Alloy Rolling Stock for London Transport, 103; Manufacture of Copper Tubes, 539; I.C.I. and Nationalisation, 650
Incandescent Heat Co., Ltd., Continuous Strip Annealing Plant, 486
Industrial Products (Speco), Ltd., Automatic Weighing Machine, 525
International Combustion, Ltd., "Ty-Rock" Full Floating Screen, 529; Poole Power Station, 582
International Marine Radio Co., Ltd., Single Side-Bank Radio Telephony in the "Caronia," 145
International Nickel Co. of Canada, Ltd., Annual Meeting, 542
International Paper Co., Rayon Pulp, 513
Iraq Petroleum Co., Ltd., Oil Pipe-Line Pumps for Iraq, 266, 295
Ismailia Valve Co., Ltd., Tidal Flap Valve, 115
I.T.D., Ltd., Electrically Operated Fork Lift Truck, 490

J

JACKSON Automatic Electric Controls, Ltd., Automatic Synchronous Clock and Time Control, 566
Jeffes, J. H. E., Thermodynamics of Substances of Interest in Iron and Steelmaking, 522
Jennings, P. H., Cast Aluminium-Silicon Alloys, Brittleness at Temperatures Above the Solidus in Castings and Welds in Aluminium Alloys, 466
Johnson Matthey and Co., Ltd., Platinum Electrodes, (315)
Johnson, N., Review of Burma Railways, 122, 150, 178, 206
Johnson and Phillips, Ltd., Wiped Joints for Aluminium-Sheathed Cables, 102; Electrical Engineering in 1948, 124; Duct Test for Seamless Aluminium-Sheathed Cable, (371)
Johnson, R. A., Modernised Ship Model Testing Tank, 561, 578
Jones, A. A., and Shipman, Ltd., Universal Cutter and Tool Grinding Machine, 395
Joslin, Edw. H., Locomotive Comparisons, 219

K

KARACHI Airport, (175)
Karapiro Power Station, New Zealand, 633, 660
Kaylor, H., Pre-Stressed Concrete Pipes, 325
Kennedy and Donkin, Thermal Storage Electric Generating Station, 306
Kenward, L. V., Obituary, (259)
Kerensky, O. A., Structural High-Tensile (Low-Alloy) Steel, 238
Kieserling, Th., and Albrecht, Hot Nut Press, 698
Kingcome, Sir John, Marine Engineering in the Royal Navy, 111, 129
Klinger, Richard, Ltd., Silicone Rubber, (507)

L

LACY-HULBERT and Co., Ltd., Compressed Air Unloading Devices, 283
Laing, John, and Son, Ltd., Open-Cast Coal Film, (427)
Lancashire Dynamo and Crypto, Ltd., Jubilee, 364
Lander, C. H., Obituary, 331
Lawrie, C., Principles of Diesel Lubrication, 536, 567
Leathard, John F., Theoretical Study of a Methodical Series of Propeller Tests, 494
Lee, Howl and Co., Ltd., High-Head Mine Pump, 336
Lee, Percy Wilton, Obituary, 667
Leliavsky, S. Bey, Structural Methods for Reducing Uplift and Leakage in Dams, 262, 292
Lessen, H. J. van, Electric and Diesel-Electric Traction on the Netherlands Railways, 255
Levin, I., Some Speculations on the Future of Structural Engineering, 76
Leyland Motors, Ltd., Assembly in Holland, (399)
Light Delivery Vehicles, Ltd., "By-Van" Delivery Vehicle, 488
Lincoln Electric Co., Ltd, Petrol-Electric Arc Welder, 254
Lind, Peter, and Co., Ltd., Rebuilding a Reinforced Concrete Shed at Liverpool, 77
Lister, R. A., and Co., Ltd., School for Distributors' Service Engineers, 144; Ministry of Supply Tour of the S.W., 420
Lloyd, J. G., British Machine Tool Industry, 49
Lloyd's Register of Shipping, Shipbuilding Returns, 73, 317, 457; Annual Summary, 1948, 252; British Corporation, (287)
Loch Sloy, Civil Engineering in 1948, 19
Lochalsh Extensions, Civil Engineering in 1948, 19
Lockspeiser, Sir Ben, New Appointment, 177
Londex, Ltd., Synchronous Process Timer, 253
London Airport Traffic, (147)
London Electric Supply Co., Ltd., Poole Power Station, 582
London Midland Region (British Railways), Rugby Locomotive Test House, 7; British Railways in 1948, 36; Snow Ploughs for British Railways, 115; Repairs to Roade Cutting, 169; Accelerated Weathering Tests for Paints, 214, 237; Glass Transport on British Railways, 312; An Old Hot Air Engine, 365; All-Steel Fabricated Railway Coaches, 445, 507; Dynamometer Car No. 3, 594; Cylinder Liner Life, (625)
London Transport, London Bus Strike, Unofficial, 30; British Railways in 1948, 38; Wage Disputes, Railwaymen's and Busmen's, 90; Aluminium Alloy Trains, (91); Light Alloy Rolling Stock for London Transport, 103; Renewal of a London Railway Bridge, 116; Experimental Double-Deck Green Line Coach, 140; Bus Map, (175); Gants Hill Station, Oliver Dawson, 234; Developments, 261, 309; Rolling Stock Overhaul at Acton Works, 298; Waterloo and Charing Cross Escalator Schemes, 361; Garages, (371); Aldenham Bus Maintenance Depot, (427); Resignalling of Chesham Branch Line, (677)
Lumiei Hydro-Electric Plant, Italy, 450
Lyall, Ernest, Obituary, 177
Lysaght's, John, Scunthorpe Works, Ltd., Extensions, 398

M

MACFARLANE, C. B., Obituary, (147)
Mackinnon, J. P., Obituary, (625)
Macklow-Smith, A., Ltd., Concrete "Workability" Meter, 29
Macmillan, R. H., Epicyclic Gear Trains, 318
Main, Henry, Obituary, 415
Maley and Taunton, Ltd., Resilient Tramcar Wheels, 367; Southend Pier Electric Trains, 477
Marconi Instruments, Ltd., Measuring Instrument Exhibition, (63); TF 933 Moisture Meter, 447
Marconi International Marine Communication Co., Ltd., Marine Communication Receivers, (571)
Marconi's Wireless Telegraph Co., Ltd., Jubilee of Pioneer Radio Factory, 133; Air Radio Maintenance Depot at Croydon, (287); "Abas" Instrument Landing System, (479); Television Camera, Television Control Centre Equipment, 526
Mardon, H. H., Lay-Out of Integrated Iron and Steelworks, 557
Marine Instruments, Ltd., Radar Equipment on M.V. "Munster," (63)
Marion Steam Shovel Co., Large Excavator Bucket, 312

Marshall, D. F., Open-Hearth Furnaces at Park Gate Works, 504
Marston, A. P., Personnel Management and Works Managers, 163
Mayne, Stanley, Civil Service Engineers, 387
McAlpine, Sir Robert, and Sons, Ltd., Poole Power Station, 582
McAlpine, Sir Robert, (Scotland), Ltd., Scottish Rail Bridges, (175)
McDonald, G. G., Graphics of Pulsating Stresses, 154
McInnes Gardner and Partners, Shipbuilding and Marine Engineering in 1948, 71
McMurtrie, Francis, Naval Construction in 1948, 11, 45; Obituary, 248
Merz and McLellan, Poole Power Station, 582
Methley, B. W., Obituary, (119)
Metropolitan-Cammell Carriage and Wagon Co., Ltd., Aluminium Alloy Trains, (91); Light Alloy Rolling Stock for London Transport, 103
Metropolitan Vickers Electrical Co., Ltd., Gas Turbine Locomotives for British Railways, 25; Electrical Engineering in 1948, 69, 98; Shipbuilding and Marine Engineering in 1948, 71; Catalagzi Power Scheme, Turkey, 100; Gas Turbines in 1948, 109; Large 220-kV Transformer for Holland, 197; Conference of Power Station Superintendents, 226; Gas Turbines for the M.W.B. Ashford Common Pumping Station, 337; Electron Diffraction Camera, Electrostatic Clutch, 383; Metrolock Control Cubicle, Twin-Tank High Vacuum Coating Tank, 462; Modernised Ship Model Testing Tank, 561, 578; Poole Power Station, 582; Mobile Power Stations in Spain, 593; New Factory at Motherwell, 607; Karapiro Power Station, New Zealand, 660
Metropolitan Water Board, Works in Progress and Constructed During 1948, 83; Chlorination of Water Supplies, 225; Gas Turbines for Ashford Common Pumping Station, 337
M'Ewen, Ewen, The Overlap Ratio of Spiral Bevel Gears, 351
Milliken Bros., Tower Testing Station, 564
Mint, Birmingham Ltd., (The), Triple Drawbench, 610
Mond Nickel Co., Ltd., Nickel in Non-Ferrous Castings, (543)
Mono Pumps, Ltd., Small Agricultural Pump, 486
Montreal Locomotive Works, Ltd., Locomotive Diesel Engine Manufacture in Canada, 385; Locomotives for India, 513
Monypenny, J. H. G., Obituary, 276
Moore, D. C., Brittleness in Temperatures Below the Solidus in Castings and Welds in Aluminium Alloys, 467
Moore, N. P. W., Powder Metallurgy and the Gas Turbine, 502
Morgan Crucible Co., Ltd., Rotary Crucible Furnace, 489
Moriston Scheme, North of Scotland Hydro-Electric Board, (259)
Morris, A. Langley, Radial and Evolute Core Sections for Power Transformers, 605
Moss, William, and Sons, Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Mott, Hay and Anderson, Gants Hill Station, London Transport, 234; Poole Power Station, 582
Mount, Sir Alan, Retirement, 627
Mowlem, John, and Co., Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Muckle, W., Deck Plating After Buckling, 464
Mullard Electronic Products, Ltd., Electronic Tube for Acceleration Measurement, 29; Industrial Photocells, 115; An Ultrasonic Generator, 365; Newsletter, (455); An Industrial Stroboscope, 471
Murex, Ltd., Composite Iron-Alnico, 447
Murex Welding Processes, Ltd., 175-A Transformer Welding Equipment, 491

N

NATION, H. J., Silo Blowers: Their Theory and Design, 208
National Coal Board, Drop-Bottom Mine Cars, (287); Plant and Equipment, (543)
National Gas and Oil Engine Co., Ltd., Annual Report, (515)
National Physical Laboratory, 606; Variable Template for Photo-Electric Colorimeter, 446; Accurate Measurement of Photo-Elastic Stress Patterns, 468; "Open Day," (543)
Neal, R. H., and Co., Ltd., 6-ton Lorry Mounted Crane, 491
Netherlands Dock and Shipbuilding Co., Launch of the Liner "Oslofjord," 401
New South Wales Railways, Annual Report, (31)
Newton Chambers and Co., Ltd., Exhibition, (613)
Newton, Victor, Ltd., New Factory at Motherwell, 607
Niagara Power Project, 422
Nickols, L. W., Internal Stresses in Hardened and Dimensionally Stabilised Steel, 132
Nithsdale, William, Obituary, 559
Nock, O. S., Locomotive Standardisation, 387, 471; Railway Signalling Developments, 1923–1948, 518, 546, 574, 602
North of Scotland Hydro-Electric Board, Ross-Shire Hydro-Electric Scheme, 93; Garry and Moriston Schemes, (259); 100-kW Windmill Generator for Orkney, 457; Hydro-Electric Schemes in Central Scotland, 592; Reduction of Costs, 627
Northcott, C. H., Personnel Management and Works Managers, 107
Northern Electric Co., Telecommunication for Canadian Mines, 421
Norton Dam, Downstream Face, 50
Norton, Sir James Farmer, and Co., Ltd., Wire Drawing Machine, 458
Nuttall, Edmund, Sons and Co., (London), Ltd., Gants Hill Station, London Transport, 234

O

OERLIKON Maschinenfabrik, Gas Turbines in 1948, 127
Ogborn, F. W., Obituary, (63)
Oldham and Sons, Ltd., Poole Explosimeter, 460
Orcutt, A. H., War Surplus Machine Tools, 108
Orlando Power Station, Extensions, (371)
Owen Falls, Hydro-Electric Scheme, 177; Dam, 573

P

PAGE, Sir Archibald, Obituary, 275
Painter Brothers, Ltd., Tower Testing Station, 564
Pametrada, Gas Turbines in 1948, 110
Pank, A., Obituary, (625)
Park Gate Iron and Steel Co., Ltd., Blast Furnace Blowers for Rotherham, 469
Parkinson, Sir Lindsay, and Co., Ltd., Power Station for Dragline Operation, 251
Parkinson Strip Mining Co., Ltd., Power Station for Dragline Operation, 251
Parnall, George, and Sons, Ltd., Ministry of Supply Tour of the S.W., 419
Parr, N. L., Marine Boiler Deterioration, 159, 199
Parsons, C. A., and Co., Ltd., Electrical Engineering in 1948, 69; Gas Turbines in 1948, 81; Poole Power Station, 582; 50-kW Turbo Generators for Instructional Use, 622
Paterson Engineering Co., Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Pattrick, P. D., Personnel Management and Works Managers, 107
Paxman, Edward Philip, Obituary, 360
Peach, Stanley, and Partners, Control Room Lighting, 227
Pedrido Bridge, Civil Engineering Structures in Spain, 297
Perman, Archibald, Obituary, 164
Perrin, J. F., An Old Hot Air Engine, 417
Peters, G. D., Ltd., Southend Pier Electric Trains, 477
Petrochemicals, Ltd., Plant for Producing Chemicals from Petrol, 188
Petter, Guy Bazeley, Obituary, 501
Pettitt, R. J., Obituary, (483)
Philips Electrical, Ltd., 600-kW Stand-by Generator, (91); Electron Microscope, 407
Pilkington Brothers, Ltd., Glass Transport on British Railways, 312
Pirelli-General Cable Works, Ltd., London-Birmingham Television Link, (515); 66-kV Oil-filled Cable in Australia, (625)
Plessey Co., Ltd., Standardised Super High-Frequency Components and Instruments, 143; An Apprenticeship Scheme, 145; Compact Electrolytic Capacitors, 170; Cartridge Starting of Internal Combustion Engines, 255; Soft Magnetic Core Material, 447
Pneulec, Ltd., Sand Cleaning Unit, 525
Poole Power Station, 582
Porn, Marcel, Obituary, 471
Port Elizabeth Water Supply, 684
Posada Bridge, Civil Engineering Structures in Spain, 297
Potts, C. J., Toil, 49
Poultney, E. C., Steam Locomotive Efficiency, 191
Pounder, C. C., Some Current Types of Marine Diesel Engine, 339, 367
Power Jacks, Ltd., Hand-Operated Lifting Truck, 338
Preload Co., Pre-stressed Concrete Pipes, 325
Prime, H. A., An Electronic Pressure Gauge, 320
Pulsometer Engineering Co., Ltd., Water Treatment Plant for a Paper Mill, 199
Pumphrey, W. I., Cast Aluminium Silicon Alloys: Brittleness at Temperatures Above and Below the Solidus in Castings and Welds in Aluminium Alloys, 466
Purnell, Walter Henry, Obituary, 107
Pye, Ltd., Radio-Telephony at Whitemoor Marshalling Yard, 326

Q

QUASI-ARC Co., Ltd., Arc Welding Instruction Book, (31)

R

RAILTON, James, Obituary, 560
Railway Executive, Rolling Stock Standardisation on British Railways, 27; Flat-Bottom Rails for British Railways, 130; Scottish Rail Bridges, (175); Radio-Telephony at Whitemoor Marshalling Yard, 326; Coal Costs: Standard Signs for Station Names, (571); British Railways Locomotive and Rolling Stock Programme, 573; New Standard British Rail, (677)
Ransomes and Rapier, Ltd., Electrical Engineering in 1948, 98
Rapid Magnetting Machine Co., Ltd., Magnetic Work Holder, 491
Rawcliffe, G. H., Experimental Transformers for University Use, 265
Rawlplug Co., Ltd., Adjustable Girder Clip, 487
Redmayne, Sir Richard A. S., Coal in 1948, 13, 38
Reid, Sir Charles C., Reconstruction of the British Mining Industry, 322
Reid, Dr. William, Reconstruction of the British Mining Industry, 322
Rendel, Palmer and Tritton, Hydro-Electric Developments in South-Eastern Australia, 628
Rennie, John A., Obituary, 248
Reyrolle, A., and Co., Ltd., An Earth Impedance Tester, 338; Engineering Student Training, (343); 32-kV, 2500-MVA, Small Oil Volume Circuit Breaker, 527; Poole Power Station, 582
Richardson, F. D., Thermodynamics of Substances of Interest in Iron and Steel Making, 522
Richardsons, Westgarth and Co., Ltd., Manufacture of Power Station Equipment at West Hartlepool, 594
Rio de Janeiro, Port Facilities, (91)
Roade Cutting, Repairs to, 169
Robey and Co., Ltd., Long-Service Recognition, (91)
Robinson, T. R., Clock and Carillon at Bradford Town Hall, 182
Rockwell Machine Tool Co., Ltd., Press Shop Equipment, 423
Roe, A. V., and Co., Ltd., Avro "Shackleton" Reconnaissance Aircraft, 512
Rogers, T. Howard, Promotion and Acceleration of Metallic Corrosion by Micro-Organisms, 424
Rolls-Royce, Ltd., Gas Turbines in 1948, 110
Rose, Downs and Thompson, Ltd., Continuous Rotary Evaporator, 311
Rossens Dam, Switzerland, 87
Ross-shire Hydro-Electric Scheme, North of Scotland Hydro-Electric Board, 93
Rotameter Manufacturing Co., Ltd., Liquid Flow Meter, 384
Rover Co., Ltd., Gas Turbines in 1948, 81
Rowden, W. F., Obituary, (371)
Rugby Locomotive Testing Station, 7
Ruston and Hornsby, Ltd., Gas Turbines in 1948, 110; Appointments, 573
Ruths Accumulators (Cochran), Ltd., Thermal Storage Electric Generating Station, 306
Ryves, Reginald Arthur, Obituary, 303

S

ST. LAWRENCE, Report, 338
Salford Electrical Instruments, Ltd., Electronic Watch Timing Equipment, 446
Schiller, P., Britain's Energy, 443
Schiphol Airport, (175)
Sciaky Electric Welding Machines, Ltd., "S.A.T. 75" Three-Phase Spot Welding Machine, 524
Scottish Region (British Railways), British Railways in 1948, 36; Reorganisation, (63), 203; Ardler Junction Collision Report, 93; Scottish Rail Bridges, (175); New Train Services, (543); Braidhurst Viaduct, Motherwell, (599)
Scrivener, Arthur, Ltd., Centreless Grinding Equipment for Twist Drills, 450
Segler, G., Silo Blowers: Their Theory and Design, 208
Severn Barrage, 165; (Leading Article, 162)
Severn Bridge, Model, 51
Shell Petroleum Co., The Cornish Engine, 243
Shoreham Harbour, Development Scheme, 187
Siemens Electric Lamps and Supplies, Ltd., Eight-Band Selenium Rectifier Photocell, 446
Sigmund Pumps, Ltd., Peripheral Pump; Process Pump, 526
Skefko Ball Bearing Co., Ltd., Standardisation of Rolling Bearings, (625)
Slack and Parr, Ltd., Fluid Mixing Unit, 524
Slater, I. G., Marine Boiler Deterioration, 159, 199
Smith, A. E., Obituary, (31)
Smith, B. O., Electrical Pressure Meter for the Measurement of Open-Hearth Furnace Differential Pressures, 521
Smith, Thomas, and Sons (Rodley), Ltd., Mobile Excavator Crane, 489
Southend Pier, Electric Trains, 477
Southern Region (British Railways), British Railways in 1948, 37; Passenger Terminal at Southampton Dock, (63); Frequency Correction Equipment for Railways Signalling Supplies, 184; Track Relaying in Watford Tunnel, (203); Electric Locomotive, "No. 20,003," 280; Electric Locomotive, (571); Combined Restaurant-Buffet Cars, (618); Diesel-Electric Shunting Locomotives, 623
Speaking Signals, Ltd., Speaking Traffic Signals, (33)
Sperry Gyroscope Co., Ltd., Electronic Simulator, Hydraulic Pressure Gauge, Torque Dynamometer, 382
Standard Telephones and Cables, Ltd., Re-Signalling at Doncaster, 73; Electrical Engineering in 1948, 124; Single Side-Bank Radio Telephony in the "Caronia," 145; V.H.F. Automatic Direction Finder, 197; Stripper Pliers for Plastic Covered Wires, 227; Low-Frequency Analyser, 448; 50-W V.H.F. Transmitter, 613
Stanhay (Ashford), Ltd., 3-Ton Mobile Crane, 459
Stephenson, Robert, and Hawthorns, Ltd., Stephenson-Crossley Diesel Shunting Locomotive, 535
Sterne, Edward T., Obituary, 513
Stewarts and Lloyds, Ltd., Electrical Engineering in 1948, 98; Open-Hearth Furnaces for a Steel and Tube Works, 139; Ore Preparation Plant at Corby, 475
Stewarts and Lloyds of South Africa, Ltd., Manufacture of Copper Tubes, 539
Stewartville Hydro-Electric Power Project, Ontario, 269
Stone, G. D., Obituary, 332
Sulzer Brothers, Ltd., Gas Turbines in 1948, 127; Frankley Waterworks, Birmingham, 215
Sutlej Power Project, (483)
Swan Hunter and Wigham Richardson, Ltd., Shipbuilding and Marine Engineering in 1948, 71; Steel Supplies and the Shipbuilding Industry, 443
Switchgear Testing Co., Ltd., Electrical Engineering in 1948, 124

T

TABOR, D., Seizure of Metals, 395
Tannahill, A. L., Application of Electrical Resistance Strain Gauges, 630
Telegraph Construction and Maintenance Co., Ltd., Magnetic Cores, 447
Terrington, J. S., Lay-Out of Integrated Iron and Steelworks, 557
Thompson, D. B., Flow of Metal in Tube Extrusion, 391
Thompson, John (Dudley), Ltd., Coiled-Strip Pickling Machine, 529
Thompson, John, Water Tube Boilers, Ltd., M.W.B. Works in Progress and Constructed During 1948, 83
Thorley, W. G. F., Personnel Management and Works Managers, 163
Thring, M. W., Open-Hearth Furnace Charging Rate, 549,
Towers, H., Obituary, (599)
Towler, F. H., Parallel Development of Hydraulic Presses, 87; Reciprocating Seals, 229; Oil Seals, 417
Townshend, E. F. R., Britain's Energy, 357, 531
Trevorrow, J. H. L., Obituary, (399)
Trillo, E. W., Engineers' Guild, 618
Tripp, G. W., The Irish Mail, 432
Trist, Ronald, and Co., Ltd., Automatic Thimble-Tube Boilers, 595
Troughton and Young, Ltd., Control Room Lighting, 227
Tube Investments, Ltd., Training Scheme for Foremen, 161
Tummel-Garry Scheme, Civil Engineering in 1948, 19
Tuplin, W. A., Using What is Known, 179; Locomotive Comparisons, 248
Turner Brothers (Birmingham), Ltd., Toothing Machine, 489

Figures in Brackets ( ) refer to paragraphs

U

UTILITY Constructions, Ltd., Smoke Eliminator for Locomotives, 366

V

VARLEY, P. C., Recovery and Recrystallisation of Rolled Aluminium of Commercial Purity, 466
Vattenbyggnadsbyran, Hydro-Electric Developments in South-Eastern Australia, 628
Vaughan, A. R., Retirement, 331
Vauxhall Motors, Ltd., Dry Spring Shackles, 364
Vickers, Ltd., Strip-Wound Pressure Vessels, 155; Board of Directors, 361
Vickers-Armstrongs, Ltd., Swept-back-Wing Version of the "Attacker" Fighter, (483); Modernised Ship Model Testing Tank, 561, 578
Victoria Falls and Transvaal Power Co., Ltd., South African Supply Undertaking, 196
Vokes, Ltd., Pipe Line Support, 460
Vulcanised Fibre, Ltd., Lightweight Factory Truck, 145

W

WADDINGTON, F. G., Obituary, (343)
Walker, Harry, Trends in Gearing, 290
Walker, W. E., Obituary, (543)
Warnock, A. E., Trouble with Mill Rollers, 696
Watford Tunnel, Track Relaying, (203)
Watson, E. A., Starting the Gas Turbine, 136
Watten Emulsifying Machines, Ltd., High-Speed Emulsifying Machinery, 157
Wellman Smith Owen Engineering Corporation, Ltd., Open-Hearth Furnaces for a Steel and Tube Works, 139
Western Region (British Railways), Gas Turbine Locomotives for British Railways, 25; British Railways in 1948, 37; Railway Truck Mover, 510
Westinghouse Brake and Signal Co., Ltd., Ministry of Supply Tour of the S.W., 419; Sutlej Power Project, (483); Closed Circuit Brake, 490
Weybridge Jig and Tool Co., Ltd., Gang Slitting Machines, 450
Whibley, R., Obituary, (677)
Whitaker, T., Air-Entrained Concrete, 671
White, C. G., Radar Installations for Ships, 560
White, H. C., Open-Hearth Furnaces at Park Gate Works, 504
Whitemoor Marshalling Yard, Radio-Telephony, 326
Wickman, A. C., Ltd., A Bench Grinding Machine, 116; Mobile Machine Tool Demonstration Unit, 622
Wild Barfield Electric Furnaces, Ltd., Toolroom Tempering Furnace, 461
William, J., The Church and Mechanical Engineering, 276
Williams, A. E., Refractory Concrete, 496
Williams, C. G., Fuel Anti-Knock Requirements of Automobile Engines, 646
Williams, Gertrude, Labour in 1948, 5, 54
Williamson, Jas., and Son, Ltd., Thermal Storage Electric Generating Station, 306
Wilson, J. S., American Road Building Machinery, 347, 374
Wolf, S., and Co., Ltd., Electric Tool User's Advisory Committees, (363)
Woodrow, C. E., Obituary, (515)
Worthington-Simpson, Ltd., Oil Pipe-Line Pumps for Iraq, 266, 295
Wright, Sir Charles, Retirement, 289

Y

YOUNG, A. P., Personnel Management and Works Managers, 80
Young, L. G., Spectograph Analysis of Very Small Samples of Steel, 589

Subjects—Classified

A

AERODROMES:

"Abas" Instrument Landing System, (479)
Air Radio Maintenance Depot at Croydon, (287)
Aircraft Hangar in Sweden, 569
Airport Lighting Remote Control, (703)
Australia's Aerodromes, (677)
B.E.A. Planned Transport to London Airport, (455)
Edinburgh (Turnhouse) Airport, (63)
Karachi Airport, (175)
London Airport Traffic, (147)
Schiphol Airport, (175), 253
Thames Seaplane Base, (677)

AERO-ENGINES AND AIRCRAFT:

Agricultural Aircraft, 106
Aircraft Servicing School, de Havilland Aircraft Co., (287)
"Attacker" Fighter, Swept-Back Wing Version, (483)
Avro "Shackleton" Reconnaissance Aircraft, A. V. Roe and Co., Ltd., 512
Boulton Paul "Balliol" Advanced Trainer, 584
"Brabazon I," Instrumentation on the, 215
Canadair IV, Radio Equipment, (392)
"Double Mamba" Propeller-Turbine Engine, 508
Fouga "Cyclone," Jet Aircraft, 515
"Vampire" Fighters to be Built in Switzerland, (203)

AERONAUTICS:

Aeronautics in 1948, 55
Air Estimates, 233
Air Registration Board, 601
Air Transport Advisory Council, (147)
Aircraft Landing Aids, 679
Aircraft Safety Standards, (31)
Airways Standard Dimensional Units, 689
Berlin Air Lift, 558
Bombing Aircraft, The Changing Scope of, 302
Bristol Aircraft Accident, 517
Capital Cost of Airliners, 500
Certification of Civil Aircraft, 667
Civil Aviation Fire School, 679
Civil Aviation Progress, 149
Flying Through Storms, 48
French Aeronautic Industry, 175
French Aeroplane Design, 91
French Aircraft Orders, 599
French Aircraft Repairs, 147
Helicopter Rotor Testing Tower, Bristol Aeroplane Co., 685
International Civil Aviation Organisation, 429
Naval Air Arm, 300
Progress of British Airliners, 394
R.A.F. in 1949–50, 275
Rocket Range Research in Australia, 414
Standardisation and the Society of British Aircraft Constructors, 114
Swedish Aircraft Accident Report, (119)
V.H.F. Automatic Direction Finder, Standard Telephones and Cables, Ltd., 197

AGRICULTURAL MACHINERY:

Agricultural Aircraft, 106
Agricultural Engineering Mission to Canada, 457
Agricultural Machinery, 218
Agricultural Pump, Mono Pumps, Ltd., 486
Decontrol of Farm Machinery, 627
Fertiliser Factory at Sindri, 242
French Agricultural Equipment, 231, 343, 703
French Agricultural Tractors, 119, 175, 259
P.E.P. Report on Agricultural Machinery, (232)
Research and Development in Agricultural Engineering, 80
Scholarships in Agricultural Engineering, (147)
Silo Blowers, Their Theory and Design, G. Segler and H. J. Nation, 208

ANNUAL REVIEW:

A Retrospect, 16
Aeronautics in 1948, 55
British Railways in 1948, 7, 36
British Steel Industry, 94
Civil Engineering in 1948, 19, 50
Coal in 1948, Sir Richard A. S. Redmayne, 13, 38
Economic Progress in 1948, 86
Electrical Engineering in 1948, 41, 69, 98, 124
Gas Turbine Progress 44, 66
Gas Turbines in 1948, 81, 109, 127
Labour in 1948, Gertrude Williams, 5, 54
Metropolitan Water Board, Works in Progress and Constructed During 1948, 83
Naval Construction in 1948, Francis McMurtrie, 11, 45
Navy of To-day and To-morrow, 2, 34
Nuclear Energy in 1948, 9
Shipbuilding and Marine Engineering in 1948, 22, 59, 71

ASSOCIATIONS, INSTITUTIONS AND SOCIETIES:

ASSOCIATION, BRITISH:
Annual Meeting, 401
Papers, (119)

ASSOCIATION, BRITISH ELECTRICAL AND ALLIED INDUSTRIES RESEARCH:
Annual General Meeting, 189
Consistency of Timing Obtained with Heavy Trigger-Released Mechanisms, L. Gosland and A. A. Hudson, 376, 402
Severity of Circuit Breaker Test Conditions, 420

ASSOCIATION, BRITISH ELECTRICAL AND ALLIED MANUFACTURERS:
Annual Report, 1948–49, 503

ASSOCIATION, BRITISH IRON AND STEEL RESEARCH:
Conference, 205
Membership, 65

ASSOCIATION, BRITISH SHIPBUILDING RESEARCH:
Third Annual Report, 177

ASSOCIATION, COMBUSTION ENGINEERING:
Inaugural Report, 261

ASSOCIATIONS, INSTITUTIONS AND SOCIETIES (*continued*):

ASSOCIATION, CROMPTONIAN:
Annual Dinner, (213)

ASSOCIATION, DIESEL ENGINE USERS:
Annual Luncheon, 457

ASSOCIATION OF ENGINEERING DISTRIBUTORS:
Extraordinary General Meeting, 342

ASSOCIATION, ENGINEERING INDUSTRIES:
Exhibition, 65

ASSOCIATION, GAUGE AND TOOL MAKERS':
Craftsman's Certificate, (284)

ASSOCIATION, HOT DIP GALVANISERS:
Formation, 279

ASSOCIATION, MACHINE TOOL TRADES':
Annual Luncheon, (609)

ASSOCIATION, MOTOR INDUSTRY RESEARCH:
Laboratory, Annual Open Days, 688
Opening of Proving Ground, 485

ASSOCIATION, REINFORCED CONCRETE:
New Branch, (315)

ASSOCIATION, SHEET METAL USERS':
Spring Meeting, (399)

ASSOCIATION OF SUPERVISING ELECTRICAL ENGINEERS:
Annual Dinner, 373

GUILD, THE ENGINEERS':
Annual General Meeting, 532; (Leading Article, 386; Letter, 618)
Northern Branch, (371)

INSTITUTE OF BRITISH FOUNDRYMEN:
Annual Conference, (472), 641

INSTITUTE OF FUEL:
Annual Luncheon, 503
Combined Heat and Power Supplies, 33, 373

INSTITUTE, FULMER RESEARCH:
Annual Report, 401

INSTITUTE, IMPERIAL:
Annual Report, 401

INSTITUTE OF INDUSTRIAL SUPERVISORS:
Institute for Foremen, 29

INSTITUTE, IRON AND STEEL:
Annual General Meeting, 393, 504, 521, 548
Carbides in Alloy Steels, H. J. Goldschmidt, 523
Electrical Pressure Meter, S. S. Carlisle and B. O. Smith, 521
Iron and Steel Making, F. D. Richardson and J. H. E. Jeffes, 522
Lay-out of Integrated Iron and Steel Works, H. H. Mardon and J. S. Terrington, 557
Open-Hearth Furnace Charging, E. L. Diamond and A. M. Frankau, 548
Open-Hearth Furnace Charging Rate, M. W. Thring, 549

ASSOCIATIONS, INSTITUTIONS AND SOCIETIES (*continued*):

INSTITUTE, IRON AND STEEL: (*continued*):
Open-Hearth Furnaces at Park Gate Works, D. F. Marshall and H. C. White, 504
Silicon-Chromium Valve Steel, C. C. Hodgson and H. G. Baron, 522
Silicon-Chromium Valve Steel, H. Allsop and P. W. Bygate, 522
Summer Meeting in Norway, 668, 693

INSTITUTE OF MARINE ENGINEERS:
Anniversary Dinner, 289
Principles of Diesel Lubrication, S. J. M. Auld and C. Lawrie, 536, 567

INSTITUTE OF METALS:
Aluminium, Rolled, P. C. Varley, 466
Annual General Meeting, (231), 390, 404, 434, 466
Appointments, (651)
Award, 345
Cast Aluminium-Silicon Alloys, W. I. Pumphrey and P. H. Jennings, 466
Castings and Welds in Aluminium Alloys, W. I. Pumphrey and P. H. Jennings, 466
Castings and Welds in Aluminium Alloys, W. I. Pumphrey and D. C. Moore, 467
Damping Capacity of Alpha Brass, K. M. Entwistle, 390
Damping Capacity of Metals, K. M. Entwistle, 390
Dinner, 392
Flow of Metal in Tube Extrusion, C. Blazey, L. Broad, W. S. Gummer and D. B. Thompson, 391
Phosphorus-Deoxidised Coppers, A. P. C. Hallowes, 390
Promotion and Acceleration of Metallic Corrosion by Micro-Organisms, T. Howard Rogers, 424
Tungsten and Tungsten Carbide Powders, H. Burden and A. Barker, 467

INSTITUTE OF THE MOTOR INDUSTRY:
Summer School, 186

INSTITUTE OF NAVIGATION:
Operational Aspects of Marine Radar, 149, 205

INSTITUTE OF REFRIGERATION:
Dinner, (147)

INSTITUTE, TIN RESEARCH:
Report, 627

INSTITUTE OF TRANSPORT:
Congress, (515)
Merseyside and District Section, (625)
Scholarships, (343)
Silver Jubilee Scholarship, 93

INSTITUTE OF WELDING:
Spring Meeting, (381)

INSTITUTE OF WELDING, INTERNATIONAL:
Annual Meeting, 137

INSTITUTION OF BRITISH AGRICULTURAL ENGINEERS:
Annual General Meeting, 545

ASSOCIATIONS, INSTITUTIONS AND SOCIETIES (*continued*):

INSTITUTION, BRITISH STANDARDS:
Dinner, 233

INSTITUTION OF CHEMICAL ENGINEERS:
Annual Dinner, (483)

INSTITUTION OF CIVIL ENGINEERS:
Joint Summer Meeting, 671
Severn Barrage, H. Headland, 165

INSTITUTION OF ELECTRICAL ENGINEERS:
Aluminium and Zinc-Based Alloys for Electric Conduit Installations, 511
Annual Dinner, 233
Annual General Meeting, 553
Causes of Flue Gas Deposits and Corrosion in Modern Boiler Plants, W. F. Harlow, 271
Christmas Lectures, (31)
Circuit Interruption, J. R. Waters, (231)
Faraday Lecture, 177
Flue Gas Deposits and Corrosion, 277
Honorary Member, 65
Limitation of Maximum Demand, A. H. Gray, 566
London Students' Section, Annual General Meeting, (677)
Radio Frequency Heating, 512
Severn Barrage, H. Headland, 165
Students' Norwegian Tour, (515)
Summer Meeting, 638

INSTITUTION OF ENGINEERS, JUNIOR:
Annual Dinner, (483)

INSTITUTION OF ENGINEERS AND SHIPBUILDERS, NORTH-EAST COAST:
More Diesel Varia, F. G. Van Asperen, 451

INSTITUTION OF GAS ENGINEERS:
Annual General Meeting, (599)
General Meeting, 653

INSTITUTION OF INCORPORATED PLANT ENGINEERS:
Annual Conference, (288)

INSTITUTION OF MECHANICAL ENGINEERS:
Annual General Meeting, 387
Annual Report of the Council for the Year 1948, 352
Causes of Flue Gas Deposits and Corrosion in Modern Boiler Plants, W. F. Harlow, 271
Dynamic Principles of Machine Foundations and Ground, J. H. A. Crockett and R. E. R. Hammond, 411, 440
Flue Gas Deposits and Corrosion, 277
Fuel Anti-Knock Requirements of Automobile Engines, G. G. Williams, 646
Graduates' Section, Annual General Meeting, (483)
Liverpool Summer Meeting, 261, 642
Machine Foundations, 445
Marine Boiler Deterioration, I. G. Slater and N. L. Parr, 159, 199
Marine Diesel Engines, C. C. Pounder, 334
Mechanical Engineering in the Chemical Industry, F. H. Bramwell, 618
Rotary, Oscillating and Reciprocating Seals, 221
Seizure of Metals, F. P. Bowden and D. Tabor, 395
Some Current Types of Marine Diesel Engine, C. C. Pounder, 339, 367
Surface Roughness of Bearing Surfaces and its Relation to Oil Film Thickness at Breakdown, A. Cameron, 540

INSTITUTION OF MINING AND METALLURGY:
Sir Julius Wernher Memorial Lecture, (651)

INSTITUTION OF NAVAL ARCHITECTS:
Copenhagen Meeting, (203)
Deck Plating After Buckling, W. Muckle, 464
Hull Form Below and Above the Load Water Plane at Rest, Christian Blom, 494
Light Alloy Cross-Channel Ship Design, E. C. B. Corlett, 465
Propeller Tests, John F. Leathard, 494
Safety of Life at Sea, G. Daniel, 410
Scholarships, (31), (259), (455)
Screwshaft Casualties, S. Archer, 494
Spring Meeting, 317, 380, 410, 438, 464, 494
Summer Meeting, (625)

INSTITUTION OF PRODUCTION ENGINEERS:
Fuel Economy and Production Efficiency, 166
Organisation and Control of Production, (287)

INSTITUTION, ROYAL:
Foundation and Development, 261

ASSOCIATIONS, INSTITUTIONS AND SOCIETIES (*continued*):

INSTITUTION OF STRUCTURAL ENGINEERS:
Some Speculations on the Future of Structural Engineering, 76

INSTITUTION OF WATER ENGINEERS:
Summer Meeting, 639

SOCIETY OF ARTS, ROYAL:
Reconstruction of the British Mining Industry, Sir Charles Reid and Dr. William Reid, 322

SOCIETY OF BRITISH AIRCRAFT CONSTRUCTORS:
Standardisation, 114

SOCIETY OF ENGINEERS:
Professional Practice in Engineering, (31)
Status of the Engineer, 149

SOCIETY, ILLUMINATING ENGINEERING:
Annual General Meeting, 545
Transport Lighting with Fluorescent Lamps, H. R. Ruff, J. N. Hull and R. V. Mills, 241

SOCIETY OF MECHANICAL ENGINEERS, AMERICAN:
Spring Meeting, (427)

SOCIETY, NATIONAL SMOKE ABATEMENT:
1949 Handbook, 517

SOCIETY, NEWCOMEN:
Summer Meeting, 555

SOCIETY, ROYAL:
Conversazione, 601
Elections, (31)

SOCIETY, ROYAL AERONAUTICAL:
Garden Party, 517
Scholarship, (625)
South African Division, (343)

ATOMIC ENERGY—*see* Nuclear Energy

B

BOILERS:
Automatic Thimble-Tube Boiler, Clarkson Thimble Tube Boilers, Ltd., 595
Causes of Flue Gas Deposits and Corrosion in Modern Boiler Plants, W. F. Harlow, 271
Marine Boiler Deterioration, I. G. Slater and N. L. Parr, 159, 199

BRIDGES:
Canso Bridge Project, 513
German Bridge Reconstruction, (371), 539
Mont-de-Terre to Fives-Lille Bridge Completion, 677
Railway Bridges in Ceylon, (343)
Renewal of a London Railway Bridge, 116
Scottish Rail Bridges, (175)
Steel Road and Rail Bridges, 593
Welded Viaduct in Sweden, 469

BRITISH STANDARDS INSTITUTION:
Agricultural Tractor Details (Drawbar, Power Take-Off and Belt Pulley), 241
Analysed Samples for Metallurgical Analysis, 704
Attachment and Drive of Circular Metal Cutting Saws for Cold Working, 356
Automobile Industry, Standards for, 241
Building Materials and Components for housing, 678
Chromium-Molybdenum Steel Castings, 279
Dimensions of Ship's Stud Link Anchor Cables, 356
Dinner, 233
Domestic Electrical Installations, 503
Electrically Welded Mild Steel Chain, 356
Equipment for Eye and Face Protection During Welding, 409
Flameproof Industrial Clothing, 623
Flanged Steel Outside-Screw-and-Yoke Wedge Gate Valves for the Petroleum Industry, 327
Gear Hobbing Machines, 210
Glossary of Process Control Terms, 356
Impregnated Asbestos-Covered Solid Copper Conductors, 356
Lubricating Nipples and Adaptors for Machinery and Vehicles, Part I; Heavy-Duty Lubricating Nipples, Part II, 188
Nickel and Nickel Alloy Products, 623
Reels for Covered, Solid, Round, Electrical Winding Wire, 409
Rolled Brass and Naval Brass Condenser Tube Plates, 572
Sampling Non-Ferrous Metals, General Guidance, 327
Seamless Copper Tubes with Plain and Screwed Ends for Steam Services, 133
Sheet Metal Pattern Development, 572

BRITISH STANDARDS INSTITUTION (*continued*):
Steel Plate Sheet and Strip, 327
Wall Chart of Identification Colours for Gas Cylinders, 572
Wrought Aluminium and Aluminium Alloys, Sheet and Strip, 279

C

CANADIAN ENGINEERING NOTES:
Aluminium Plant Surveys, 28
Auxiliary Plant to Relieve Ontario Power, 513
Beauharnois Expansion, 285
Bridge River Hydro-Electric Station, 285
Canso Bridge Project, 513
Cellophane Plant Extensions, 28
Coal, 338
Concrete Mixing Plant, 28
Haulageway Project, 513
Hydro-Electric Power Projects, 513
Locomotives for India, 513
Log Movements in Power Dams, 567
Oil and Pipe Lines, 567
Oil Recovery by "Fluidisation," 513
Plastic Board Plant, 28
Power Plans in British Columbia, 513
Power Projects, 28, 338
Pulp and Paper, 285
Quebec Steel Plant Expansion, 285
Railway Equipment, 285
Rayon Pulp, 513
Research, 285
Rod Mill, 513
St. Lawrence Report, 338
Ship for South America, 513
Shipbuilding, 567
Steel, 285
Sterne, Edward T., Obituary, 513
Sulphuric Acid Project, 513
Tidal Power Scheme, 28
Titanium Ore Project, 285

CANALS:
Falsterbo Canal, (543)
Oder-Danube Canal, 675

COAL AND COKE:
Australian Briquetting Plant, 284
Canadian Coal Production, 338
Coal in 1948, Sir Richard A. S. Redmayne, 13, 38
Coal Bunker Supplies and Prices, 601
Coal Industry, 90, 314
Coal Miners' Holidays, 482
Coal Processing, 134
Coal Production, 62, 202, 482, 570, 598, 650
Coal Wharf at Swanscombe, 242
Coalfield Survey in South Wales, (91)
Coke Stocks, (543)
European Coal Allocation, (455)
French Coal Allocation, 599
French Coal Production, 175, 203, 371, 515
Midland Coalfield, 573
Oil Shale and Cannel Coal Conference, 545
Open-Cast Coal Film, (427)
Opencast Coal Production, 485, (571); (Leading Article, 558)
Ruhr Coal Exports, 91

CODES OF PRACTICE:
Heating and Thermal Insulation, 456
Jointless Flooring, 678
Load-Bearing Walls (Structural), 73
Tile and Slab Flooring, 356
Water Supply, 40

CONCRETE:
Air-Entrained Concrete, T. Whitaker, 671
Concrete Mixing Plant, 28
Concrete Pump, Blaw-Knox, Ltd., 556
Concrete "Workability" Meter, 29
Pre-Stressed Concrete, Conference on, 205, (677)
Pre-Stressed Concrete Pipes, H. Kaylor, 325
Production of Colloidal Concrete, 283
Quality of Concrete, 627
Ready-Mixed Concrete Transport, Blaw-Knox, Ltd., 339
Rebuilding a Reinforced Concrete Shed at Liverpool, 77
Refractory Concrete, A. E. Williams, 496
Reinforced Concrete Reservoir at Orleans, 437

CONTINENTAL ENGINEERING NEWS:
Aircraft Hangar in Sweden, 569
Antwerp, Belgium, Improvements to the Port, 539
Belgian Railways, Restoration, 539
Building Material in Poland, 253
Cartagena Aqueduct, Spain, 253
Fasideri Dam, Greece, 301
Filettole-Livorno Aqueduct, Italy, 648
German Railway Bridges, Reconstruction, 539
Greek Railways, Restoration, 569

CONTINENTAL ENGINEERING NEWS (*continued*):
Harbour Works in Belgian Congo, 253
Highways in Portugal, 253
Hydraulic Works in Turkey, 593
Iron and Steel Industry in Belgium and Luxemburg, 301
Iron and Steel Industry in U.S.S.R., 301
Italy, Progress of Railway Construction in, 87
Liege International Fair, 253
Lumiei Hydro-Electric Plant, Italy, 450
Mobile Power Stations in Spain, 593
Public Works in the Port of Santander, Spain, 450
Railway Electrification in Spain, 253
Reconstruction in Norway, 253
Rotterdam, Holland, Restoration, 539
Schiphol Airport, Holland, New Runway, 253
Swedish Iron and Steel Industry, 87
Swedish Oil Tanker, 253
Swedish Transformer, 648
Switzerland, New Dam, 87
Ten-Year Railway Plan in Switzerland, 301

D

DAMS:
Fasideri Dam, Greece, 301
Floodgates, Semi-Automatic, on a 600ft Spillway, H. P. Brace, 509
Garrison Dam in North Dakota, 365
Log Movements in Power Dams, 567
Owen Falls Dam, 573
Remodelling of the Esna Barrage, Egypt, (119)
Severn Barrage, H. Headland, 165
Severn Barrage Again, 162
Structural Methods for Reducing Uplift and Leakage in Dams, Serge Leliavsky Bey, 262, 292
Switzerland, New Dam, 87
Tidal Power and the Severn Barrage, H. Headland, 141, 171

DOCKS AND HARBOURS:
Antwerp Port Improvements, 539
Dock Labour, 514
Harbour Works in Belgian Congo, 253
International Congress for Harbour Engineering, (455)
Langton, Brocklebank and Canada Dock Improvements, Liverpool, 133
London Dock Strike, 426, 454
Port Facilities for Rio de Janeiro, (91)
Portuguese Port Survey, (63)
Royal Dockyards, 503
Santander, Port, Spain, Public Works in, 450
Shoreham Harbour Development Scheme, 187
Stockholm's Floating Dock, (119)

E

ELECTRICAL MATTERS:
Air-Insulated Metalclad Switchgear, English Electric Co., Ltd., 170
All-Electric Interlocking, 106
Aluminium and Zinc-Based Alloys for Electric Conduit Installations, 511
Application of Electrical Resistance Strain Gauges, A. L. Tannahill, 630
Automatic Voltage Regulator, Gresham Transformers, Ltd., 447
Battery Electric Vehicles, 588
Beauharnois Expansion, 285
British Electrical Power Convention, 656, 683
British Standards for Domestic Electrical Installations, 503
Cable Installation, 220-kV Impregnated Pressure, British Insulated Callender's Cables, Ltd., 310
Canadian Power Project, 338
Capacitance Proximity Relay, Fielden (Electronics), Ltd., 364
Carrier Current Communication on 110-kV Network, 255
Catalagzi Power Scheme, Turkey, 100
Circuit Breaker, 132-kV, 2500-MVA, Small Oil Volume, A. Reyrolle and Co., Ltd., 527
Condensers for Power Factor Improvement, (315)
Control Cubicle, Metrolock, Metropolitan-Vickers Electrical Co., Ltd., 462
Control Room Lighting, 227
D.C. Ionisation Voltage Tester, Airmec Laboratories, Ltd., 407
Distribution Pillars and Panels, W. T. Henley's Telegraph Works Co., Ltd., 673
Duct Test for Seamless Aluminium-Sheathed Cable, (371)
Earth Impedance Tester, Evershed and Vignoles, Ltd., 338
Electric Power Production in Europe, (12)
Electric Tool Users' Advisory Committees, (363)

ELECTRICAL MATTERS (*continued*):
Electrical Engineering in 1948, 41, 69, 98, 124
Electricity Consumers' Control Units, (259)
Electricity Load Spreading, 121
Electricity Supply Statistics, 1946–47, 429
Electrolytic Capacitors, Plessey Co., Ltd., 170
Electro-magnetic Fields in Guides and Cavities, 273
Electro-magnetic Problems, 485
Electron Diffraction Camera, Metropolitan-Vickers Electrical Co., Ltd., 383
Electron Microscope, Philips Electrical, Ltd., 407
Electronic Pressure Gauge, H. A. Prime and T. J. Chi, 320
Electronic Simulator, Sperry Gyroscope Co., Ltd., 382
Electronic Tube for Acceleration Measurement, Mullard Electronic Products, Ltd., 29
Electrostatic Clutch, Metropolitan-Vickers Electrical Co., Ltd., 383
Fault Locator, British Insulated Callender's Cables, Ltd., 527
Fluorescent Lamp Fitting for Mines (167)
Fluorescent Lighting in Turbine-House, (245)
Fluorescent Street Lighting in Denmark, 227
French Electric Power Shortage, 571
French Thermal Generating Plants, 483
Frequency Correction Equipment for Railway Signalling Supplies, 184
Fulham Power Station, Grit Arresting Plant, 227
Generating Plant Shortage, 337
Generator, 600-kW Stand-By, (91)
Genissiat Hydro-Electric Power Plant Fire, 343
Government Department Electrical Specifications: G.D.E.S., 22; 1948, For Wires, (91); G.D.E.S., 24, For Cable Drums, (63)
Halogen Leak Detector, British Thomson-Houston Co., Ltd., 407
High-Voltage Transmission in Great Britain, T. Graeme N. Haldane, 674, 699
Industrial Photocells, Mullard Electronic Products, Ltd., 115
Industrial Stroboscope, Mullard Electronic Products, Ltd., 469
Insulation Testers of Improved Range, Evershed and Vignoles, Ltd., 171
Joint Consultation in the Electricity Supply Industry, 146
Karapiro Power Station, New Zealand, 633, 660
Lectures on Electronics in Industry, (91)
Load Control of Electrical Power Systems, 444
Manufacture of Power Station Equipment at West Hartlepool, Richardsons Westgarth and Co., Ltd., 594
Metal-Clad Single-Break Switchgear, Cooke and Ferguson, Ltd., 591
Microphonic Burglar Alarm, General Electric Co., Ltd., (287)
"Minerva" Smoke Detector, Electronic Instruments, Ltd., 383
Mobile Power Stations in Spain, 593
Moisture Meter, Marconi Instruments, Ltd., 447
Motor Winding Impregnation, Hopkinsons Electric Co., Ltd., 284
Non-Flood Battery Filling Device, Chloride Electrical Storage Co., Ltd., (642)
Nord Electric Plants, 63
North-Western Electricity Consultative Council, (203)
Oil Circuit Breaker, 3-Phase, 275-kV, British Thomson-Houston Co., Ltd., 463
Oil-Filled Cable, 66-kV, in Australia, (625)
Operating Results at British Power Stations, 585
Orlando Power Station, Johannesburg, Extensions to, (371)
Oscilloscope, Universal, Cinema Television, Ltd., 385
Periscopic Sextant, Henry Hughes and Son, Ltd., 408
Personnel of the Electrical Industry, 252
Photo-Elastic Stress Patterns, Accurate Measurement of, 468
Poole Explosimeter, Oldham and Sons, Ltd., 400
Poole Power Station, 582
Power Station for Dragline Operation, 251
Power Station Fuel Ash and Land Reclamation, 103
Power Station Superintendents, Conference, 149, 226
Power System Analysis, 421, 478
Progress Towards a Standard Electricity Bulk Supply Tariff, (371)

ELECTRICAL MATTERS (*continued*):
Radial and Evolute Core Sections of Power Transformers, A. Langley Morris, 605
Reed Vibrometer, General Electric Co., Ltd., 254
Repeater Fuses for Automatic Reclosure, Allen West and Co., Ltd., 595
Research and Electricity Supply, 592
Selenium Rectifier Photocell, Eight-Band, Siemens Electric Lamps and Supplies, Ltd., 446
Severity of Circuit Breaker Test Conditions, 420
South African Supply Undertaking, 196
Southern Electricity Consultative Council, 233
Standardised Super High-Frequency Components and Instruments, Plessey Co., Ltd., 143
Stripper Pliers for Plastic Covered Wires, Standard Telephones and Cables, Ltd., 227
Summer School in Electrical Engineering, 1948, British Thompson-Houston Co., Ltd., (75)
Summer-Winter Differential Charge for Electricity, (427)
Swedish Transformer, 648
Thermal Efficiencies of British Generating Stations, 448
Thermal Storage Electric Generating Station, 306
Torque Dynamometer, Sperry Gyroscope Co., Ltd., 382
Torsion Safety Device for Power Pylons, 649
Tower Testing Tank, Painter Brothers, Ltd., 564
Transformer Condenser Bushing, Outdoor, Ferranti, Ltd., 528
Transformer for Holland, 220-kV, Metropolitan-Vickers Electrical Co., Ltd., 197
Transformers, Experimental, for University Use, G. H. Rawcliffe, 265
Transmitter, 50-W V.H.F., Standard Telephones and Cables, Ltd., 613
Transport Lighting with Fluorescent Lamps, 241
Turbo-Generators, 50-kW, for Instructional Use, C. A. Parsons and Co., Ltd., 622
Twin-Tank High-Vacuum Coating Tank, Metropolitan-Vickers Electrical Co., Ltd., 462
Ultrasonic Generator, Mullard Electronic Products, Ltd., 365
Unattended Lighthouse Power Plant, Austinlite, Ltd., 363
Variable Template for Photo-Electric Colorimeter, National Physical Laboratory, 446
V.H.F. Automatic Direction Finder, Standard Telephones and Cables, Ltd., 197
Wages in the Electricity Supply Industry, 676
Watch Rate Recorder, Dawe Instruments, Ltd., 409
Willesden Grid Sub-Station, (242)
Winding Failures During Impulse Tests on Transformers, Detection of, 450
Windmill Generator, 100-kW, for Orkney, 457

ENGINES:
Cartridge Starting of Internal Combustion Engines, 255
Cornish Engine, 243
"Double Mamba" Propeller-Turbine Engine, 508
Fuel Anti-Knock Requirements of Automobile Engines, G. G. Williams, 646
Marine Diesel Engines, 334
Non-Abrasive Cleaning of Engine Parts, (366)
Old Hot Air Engine, 365, (Letter, 417)
Pilot Injection for Oil Engines, 392
Preservation of Historic Engines, 247
Quietening the Oil Engine, 386
Scavenging of Medium Speed Two-Stroke Oil Engines, 134
Service for "G.M." Diesel Engines, (232)
Some Current Types of Marine Diesel Engine, C. C. Pounder, 339, 367

EXHIBITIONS:
Air Survey Exhibition, 187
Bicycle and Motor-Cycle Show, (147)
Bramah Bicentenary, 601
British Industries Fair, 458, 486, 523; (Leading Article, 586)
Building and Engineering Exhibition, (543)
Canadian International Trade Fair, (259)
Engineering Industries Association, 65
Exhibition for the Blind, (677)
Exhibition of Packaging Materials, (147)
Festival of Britain, 1951, 121, 679; Traffic Arrangements, 93
Flexible Packaging Materials, (515)
Hanover Technical Fair, 643, 658

EXHIBITIONS (*continued*):
"Homes for London," (175)
Industrial Architecture, (282)
Industrial Finishes, (343), 560
International Fair of Ghent, (31)
Kelvin Exhibition, (203)
Leicester Industries, (343)
Liege International Fair, 253, (371)
Leipzig Technical Fair, 1949, 355
Marconi Measuring Instrument Exhibition, (63)
Mechanical Music, (31)
Medway Exhibition, (110)
"More Power and What It Means," 429
New York Automobile Exhibition, (31)
Newton Chambers, 613
"On Our Way," (175)
Paris Fair, 651
Physical Society's Exhibition, 382, 407, 446
Power and Heat for the Textile Industry, (203)
Pre-Stressed Concrete, 279, 326
Radio Components Exhibition, (231)
Rand Show, 510
S.B.A.C. Flying Display and Exhibition, (599)
Scientific Instruments of George III, 429
Scottish Industries, 373
Smithfield Show, (287)
"The World from the Air," 149
Trade Exhibition Advisory Committee, 1

F

FRENCH ENGINEERING NEWS:
Aeronautic Industry, Progress in, 175
Aeroplanes, Foreign Design, 91
Agricultural Equipment, 231, 259, 343, 703
Aircraft Repairs, 147
Automobile Production, 119, 571
Bulldozers for Use on Canals, 543
Ciotat Naval Shipyard, 599
Coal Allocation, 599
Coal Mine Modernisation, 203
Coal Production, 175, 203, 371, 515
"Constellation" Aircraft Ordered, 599
Copper for Electric Cables and Conductors, 91
Development in Morocco, 231, 259
Dunkirk, Port of, Handling Installations, 543
Electric Locomotives and Coach Units of the S.N.C.F., 399
Electricité de France Budget, 91
Electricity and Compressed Air in Mines, 455
Foundry Products, 259
French Fleet Reconstruction, 371
French Industry, 455
French Navy, 91
Generating Plant Construction, 571
Genissiat Hydro-Electric Power Plant Fire, 343
Henin-Lietard Mining Group, 399
Highways Union Meeting, 703
Hydro-Electric Construction Plants, 599
Hydro-Electric Development of the Rhone, 203
Hydro-Electric Equipment, 427
Hydro-Electric Position, 287
Inland Water Fleet, 427
Iron Ore Seams in Indo-China, 343
Jet Aircraft, 515
Locomotive Production, 571
Locomotives for the S.N.C.F., 483
Loire-Rhone Railway Statistics, 543
Marshall Aid Credits to Algeria, 287
Marshall Plan, 1948, 259
Mechanical Equipment for French Mines, 543
Miners' Bonuses, 515
Miners Output and Strikes, 427
Miners, Shortage of, 175
Mines, Re-equipment of, 677
Modernisation and Equipment Plan, 147; Report, 625
Modernisation and Re-equipment of the S.N.C.F., 63
Monnet Plan, 175, 203, 231
National Assembly on the Ruhr Statute, 63
National Public Works Federation, 287
National Tractor Allocation Commission, 175
Nationalised Mines, 31
Nord Electric Plants, 63
Nord Railway Network Reconstruction, 677
Oil Refining Capacity, 91
Oil Research, 315
Oil Seam in the Herault, 399
Paris Fair, 651
Paris-Lille Line Track Renewal, 651
Paris-Lyon Railway Electrification Report, 371
Pipe-Line Between Le Havre and Paris, 315, 483
Railway Employees, Health Supervision, 371
Railway Figures, 287
Research Centre, Verneuil, 315

FRENCH ENGINEERING NEWS (*continued*):
Road Transport Crisis, 483
Rolling Stock, 31, 203, 343, 399, 571, 703
Rolling Stock Purchasing Mission, 651
Ruhr Coal Exports, 91
Salon de l'Automobile, 571
Sheet Metal Allocations, 483, 625
S.N.C.F. Administration, 651
S.N.C.F. Deficit, 625
S.N.C.F. Reconstruction, 119
Special Steel Production, 119
Steel Controls, 147
Steel Industry, 119, 315, 455, 677
Steel Negotiations Between France and the Trizone, 677
Steel Plants, 63, 515
Steel Plating, 677
Steel Product, Delivery Delays, 703
Steel Production, 31, 203, 287, 371, 703
Steel Tests, 427
Strikes, Cost of, 31
Thermal Generating Plants, 483
Tinplate Allocation, 203
Tractor Production, 119
Tractors, Influence of Research on, 427
Traffic Increase on S.N.C.F., 543
Transformer for Energie Electrique du Maroc, 147
Trawler Construction, 543
Unemployment Among Shipyard Workers, 515

G

GAS TURBINE—*see* Internal Combustion Turbine

H

HYDRO-ELECTRIC:
Auxiliary Plant to Relieve Ontario Power, 513
Bridge River Hydro-Electric Station, 285
French Hydro-Electric Position, 203, 287, 427, 599
Genissiat and Donzere-Montdragon Hydro Stations, 203
Hydro-Electric Developments in South-Eastern Australia, 628
Hydro-Electric Plant in Italy, 595
Hydro-Electric Progress in Canada During 1948, 170
Hydro-Electric Scheme in Ontario, 565
Hydro-Electric Scheme for Southern China, (119)
Hydro-Electric Schemes in Central Scotland, 592
Lumiei Hydro-Electric Plant, Italy, 450
Niagara Power Project, 422
North of Scotland Hydro-Electric Board, Garry and Moriston Schemes, (259); Hydro-Electric Schemes in Central Scotland, 592; Reduction of Costs, 627; Ross-Shire Hydro-Electric Scheme, 93; Windmill Generator for Orkney, 100kW, 457
Owen Falls Hydro-Electric Scheme, 177
Power Extension Project, 28
Power Plans in British Columbia, 513
Power Supply in Ireland, 663
Stewartville Hydro-Electric Power Project, Ontario, 269
Sutlej Power Project, (483)
Tidal Power Scheme, 28
Tidal Power and the Severn Barrage, H. Headland, 141, 171

I

INDUSTRIAL AND LABOUR NOTES:
Administration of Nationalised Industries, 174
A.E.U. National Committee, 702
"Aids to Production," 570
Amalgamated Union of Foundry Workers, 702
American Management Techniques, 286
Anglo-American Council on Productivity, 202, 230
Association of Engineering Distributors, 342
Association of Supervisors' Discussion Groups, 542
Average Weekly Earnings and Hours, 398
Belgium's Industrial Recovery, 230
Blasting, Regulations for, 342
Breathing, Reviving and Rescue Apparatus, 202
Britain's Exports, 454
Coal Industry, 90, 314
Coal Miners' Holidays, 482
Coal Output, 62, 202, 482, 570, 598, 650
Confederation of Shipbuilding and Engineering Unions, 542, 570
Copper, Lead and Zinc, 570
Dock Labour, 514
Economic Planning Board, 146
Education and Training in the Mining Industry, 258

INDUSTRIAL AND LABOUR NOTES (*continued*):

Employment and Unemployment, 90, 202, 314, 426, 570, 702
Engineering Industry and the Budget, 62
Engineering Industry and German Competition, 174
Engineering Legal Society, 90
Engineering Unions and Productivity, 62
Export Drive to North America, 454
Export Forms, 202
Export Prices, 624
Export Targets, 258
Exports and Industrial Production, 314
Exports in January, 202
Factory Inspector's Report, 258
"Facts About Steel, The," 342
Federation of British Industries, 570
Foreman and Work Measurement, 702
Foreman's Task in "Man-Management," 342
Foundry Conditions, 454
Foundry Foreman's Training Course, 426
Future of British Industry, 650
Gas Industry, Future of, 370
German Trade Talks, 314
Government Bulk Buying, 624
Government and Industry, 230
"Hidden Employment" in the Engineering Industry, 702
Hidden Unemployment in the Engineering Industry, 482
I.C.I. and Nationalisation, 650
Incentives for Management, 398
Increased Productivity, Responsibility for, 230
Industrial Building, 514
Industrial Buildings, Small Extensions to, 624
Industrial Disputes, 118
Industrial Management, Survey of, 62
Industrial Outlook, 174
Industrial Production, 624, 650; Index of, 30, 118, 370, 514
Industrial Rehabilitation, 426
Industrial Safety, 598
Industry and Employment in Scotland, 542
Industry and the Profits Tax, 90
International Labour Organisation, 676
International Nickel Company of Canada, Ltd., 542
Iron and Steel Bill, 314; Exemptions, 174
Iron and Steel Board, 398
Iron and Steel Consumers' Council, 398
Iron and Steel Nationalisation, 30, 118
Iron and Steel Orders, 624
Iron and Steel Prices, 90
Iron and Steel Production, 174, 286, 426, 542, 650
Joint Consultation in the Electricity Supply Industry, 146
Lead Prices, 30
Limitation of Dividends, 258
London Dock Strike, 426, 454
London's Unofficial Bus Strike, 30
Management in the Ironfounding Industry, 598
Management for Production, 482
Manpower and Industrial Production, 370
Manpower Statistics, 286
Metal Grinding in Factories, 482
Metal Prices, 398
Miners' Bonus Claim, 230
Monopolies and Restrictive Practices Commission, 62, 286
National Industrial Safety Conference, 258
National Joint Advisory Council, 146, 514
National Production Advisory Council, 202
Nationalisation and Initiative, 454
Nationalising Shipbuilding, Proposals for, 598
Need for Incentives, 286
Non-Ferrous Metals, 454; Prices, 676
"Oxford" Management Conference, 230
Personal Incomes, Costs and Prices, 514
Plant Replacement and the Budget, 118
Policy for Industry, 570
Production Problems, 90
Production and "Thwarted Enterprise," 118
Productivity and the Re-equipment of Industry, 146
Productivity and Sales Management, 146
Railway Disputes, 676
Railway Strikes, Unofficial, 650, 624
Regional Boards for Industry, 62
Role of Free Enterprise, 202
Royal Ordnance Factories, 30
Scunthorpe Steel Works Extensions, 398
Shipping, Nationalisation of, 118
Steel Consumers and Nationalisation, 146
Tax Relief for Temporary Commercial Premises, 30
Taxation and Incentive, 454
Trade with Canada and the U.S.A., 676
Trade Disputes, 30, 174, 286, 398, 514, 624

INDUSTRIAL AND LABOUR NOTES (*continued*):

Trade with Finland, 146
Trade with Germany, 370
Trade, Overseas, 118, 230, 342, 482, 598, 676
Trade Unions and the Nationalised Industries, 370
Training of Apprentices, 342
T.U.C. and the Budget, 454
T.U.C. and Nationalisation, 258
T.U.C. and Price Control, 514
Union Officials and Time and Motion Study, 370
United States Steel Corporation, 314
Wage Disputes, Railwaymen's and Busmen's, 90
Wage Rates, Changes in, 30, 174, 286, 426
Wages in the Electricity Supply Industry, 676
Wages in the Engineering Industry, 598
Wages, Iron and Steel Craftsmen's, 542
Wages and Prices, 370
Wages, Railway, 62, 342, 482, 514, 598, 702
Wages, Road Passenger Transport, 258
Wages and Working Hours, 426
"What the T.U.C. is Doing," 426
Workers and the Nationalised Industries, 624
Workmen's Compensation, 174

INTERNAL COMBUSTION TURBINE:

Cartridge Starting of Internal Combustion Engines, 255
Critical Review of Gas Turbine Progress, 44, 66
"Derwent V" Jet Engine Test, 133
Gas Turbine Locomotives for British Railways, 25
Gas Turbine for Road Transport, 133
Gas Turbines in 1948, 81, 109, 127
Gas Turbines for the M.W.B. Ashford Common Pumping Station, 337
Industrial Gas Turbine Development, 381
Powder Metallurgy and the Gas Turbine, P. Grootenhuis and N. W. P. Moore, 502
Starting the Gas Turbine, E. A. Watson, 136

IRON AND STEEL:

Allocation of Steel to Blitzed Areas, 345
Belgium and Luxemburg's Iron and Steel Industry, 301
Canadian Steel Production, 285
Chromium-Free Heat-Resisting Steels, 104
Cleavage Fractures in Mild Steel, 691
Direct Hardening of Hot-Rolled Steel, 597
Education and Training in the Steel Industry, 317
"Facts About Steel, The," 342
French Production of Special Steels, 119
French Steel Controls, 147
French Steel Industry, 119, 315, 455, 677
French Steel Plant, 63, 515
French Steel Production, 31, 203, 287, 371, 703
German Iron and Steel Scrap, (551)
Hydrogen on the Ductility of Cast Steel, Effect of, 329
Internal Stresses in Hardened and Dimensionally Stabilised Steel, L. W. Nickols, 132
Iron and Steel Bill, 174, 314, 530, 573
Iron and Steel Board, 398
Iron and Steel Consumers' Council, 398
Iron and Steel Craftsmen's Wages, 542
Iron and Steel and Nationalisation, 30, 118, (203)
Iron and Steel Orders, 624
Iron and Steel Prices, 90
Iron and Steel Production, 33, 174, 286, 426, 542, 650
Iron and Steel Subsidies, 394
Isothermal Treatment of Low-Alloy Steels, 328
Lay-Out of Integrated Iron and Steelworks, H. H. Mardon and J. S. Terrington, 557
Management in the Ironfounding Industry, 598
Modernisation of the French Steel Industry, 454
Ore Preparation Plant at Corby, 475
Progress in the British Steel Industry, 94
Quebec Steel Plant Expansion, 285
Scunthorpe Steelworks Extensions, 398
Shipyard Steel Allocations, (287)
South African Iron, Steel, Engineering and Metallurgical Industries, 539
Spectrograph Analysis of Very Small Samples of Steel, L. G. Young, 589
Steel Consumers and Nationalisation, 146
Steel Economy, 233
Steel Shop of Bellias and Morcom, Ltd., 637
Steel Supplies and the Shipbuilding Industry, 443
Steels for Steam Pipes, 216

IRON AND STEEL (*continued*):

Structural High-Tensile (Low-Alloy) Steel, O. A. Kerensky, 238
Swedish Iron and Steel Industry, 87
Temper Brittleness of Carbon Steels, 596
Thomas Steel, 427
United States Steel Corporation, 314
U.S.S.R. Iron and Steel Industry, 301
Yield Point of Austenitic Steels at Low Temperatures, 481

L

LEADING ARTICLES:

A Retrospect: Nuclear Power and the Gas Turbine, Economic Background, Productivity, Labour, Nationalisation, Miscellany, Food and Engineers, 16, 17, 18
Afterthoughts on the B.I.F., 586
Agricultural Aircraft, 106
Agricultural Machinery, 218
All-Electric Interlocking, 106
American Railway Problems, 692
Anglo-American Council on Productivity, 500
Atomic Energy Issues, 640
Berlin Air Lift, 558
Blackpool and Paddington, 666
Britain's Economy, Marshall Aid and American Imports, 78
Business of Defence, 358
Capital Cost of Airliners, 500
Changing Scope of Bombing Aircraft, 302
Church and Mechanical Engineering, 246
Civil Service Engineers, 302
Coal Processing, 134
Consulting Etiquette, 586
Defence in 1949, 218
Dollar Exports Board, 666
Duties and Responsibilities, 614
Economic Survey, 330
Education of Technicians, 274
Engineers' Guild, 386
Flying Through Storms, 48
German Competition, 190
Giving the "Guv'nor" a Big Hand, 470
Increasing the Flow of the Thames, 614
Industry, Engineers and Architects, 330
Influence of Paint, 442
International Engineering Collaboration, 48
Iron and Steel Bill, 530
Locomotive Standardisation, 78
Mission to Canada, 190
Naval Cold-Weather Trials, 162
Navy Estimates, 246
On Observation, 442
Opencast Coal, 558
Patent Changes, 358
Preservation of Historic Engines, 247
Primary Inventions, 470
Quietening the Oil Engine, 386
R.A.F. in 1949–50, 275
Realistic Budget, 414
Rocket Range Research in Australia, 414
Safety in Mines Research, 1947, 692
Scavenging of Medium Speed Two-Stroke Oil Engines, 134
Severn Barrage Again, 162
Signalling and Speed, 530
Unofficial Railway Strikes, 640

LETTERS TO THE EDITOR:

An Old Hot-Air Engine, J. F. Perrin, 417
Britain's Energy, E. F. R. Townshend, 357, 531; P. Schiller, 443
British Machine Tool Industry, J. G. Lloyd, 49
Church and Mechanical Engineering, J. William, 276
Civil Service Engineers, Guildsman, 333; Stanley Mayne, 387
Dirt in Lubricants, D. Clayton, 136
Employers' Liability in 1949, S. J. Butcher, 618
Engineers' Guild, E. W. Trillo, 618
Future of Structural Engineering, G. A. Gardner, 192
International Engineering Collaboration, R. E. Blackburn, 163
Locomotive Comparisons, E. W. Herrington, 108; Edw. H. Joslin, 219; W. A. Tuplin, 248
Locomotive Performance, William C. Budd, 696
Locomotive Standardisation, L.P., 108; F. A. S. Brown, 135, 332, 417, 502; H. Holcroft, 192, 357; O. S. Nock, 387, 471
Oil Seals, C. R. Dibben, 357; B. Cooke, 417; Frank H. Towler, 417
Overheating of Rotary Oil Seals, B. Cooke, 248
Personnel Management and Works Managers, W. Coppen Bartley, 50; A. P. Young, 80; C. H. Northcott, 107; P. D. Pattrick, 107; A. P. Marston, 163; W. G. F. Thorley, 163
Politics, Trade Unions and Work, W. Howes, 220
Powder Metallurgy and the Gas Turbine, P. Grootenhuis and N. P. W. Moore, 502

LETTERS TO THE EDITOR (*continued*):

Radar Installations for Ships, C. G. White, 560
Starting the Gas Turbine, E. A. Watson, 136
Status of the Engineer, W. A. M. Allan, 219, 471; A. W. Crampton, 276; John H. Flux, 417, 502
Status of the Foreman, I. A. Currey, 50
Steam Locomotive Efficiency, E. C. Poultney, 191
Theses, Discriminated, 80; A. W. Crampton, 136
Toil, C. J. Potts, 49
Training of Technicians, A. P. M. Fleming, 333
Trouble With Mill Rollers, A. E. Warnock, 696
War Surplus Machine Tools, 108

LITERATURE:

Books Received, 80, 114, 131, 164, 192, 220, 249, 270, 305, 333, 389, 417, 443, 503, 532, 560, 588, 616, 652, 668

Books of Reference:

Directory of Shipowners, Shipbuilders and Marine Engineers, 1949, 336, 393
F.B.I. Register of British Manufacturers, 1948–9, 513
Propeller Performance Estimation Handbook, 198
Seaton and Rownthwaite's Pocket Book of Marine Engineering Rules and Tables, 678
Statistical Year Book of the World Power Conference: No. 4, Data on Resources and Annual Statistics for 1936–1946, 300

Reviews:

Aircraft Power Plants, 389
Aircraft Strength of Materials, H. D. Conway, 305
Archdale Machine Tools, 249
Automobile Chassis Design, R. Dean-Averns, 305
Civil Engineering for the Clerk of Works, V. C. Whiting and K. Mills, 333
Coal: Production, Distribution, Utilisation, P. C. Pope, 615
Concrete Materials and Practice, L. J. Murdock, 270
Conurbation, 305
Corrosion Handbook, Herbert H. Uhlig, 416
Crimp and Bruges Tables and Diagrams for Designing Sewers and Water Mains, 532
Diamond Tool Patents III: Truing of Grinding Wheels, W. Jacobsohn, 305
Dimensions in Engineering Theory, G. W. Stubbings, 532
District Heating in American Housing, 443
Drainage of Land, Estates and Buildings, S. Gale, 502
Dredge, Drain, Reclaim: The Art of a Nation, Dr. Joh. Van Veen, 360
Dynamics, S. L. Green, 389
Elastic Resistance Strain Gauges, W. B. Dobie and P. G. G. Isaac, 502
Electric and Diesel-Electric Locomotives, D. W. Hinde, 361
Electric Winders, H. H. Broughton, 164
Electrolytic Polishing and Bright Plating of Metals, S. Wernick, 136
Elementary Communications Practice, W. T. Perkins, 114
Engineering Management, Struan A. Robertson, 615
Engineering Metallurgy, W. E. Wood, 639
Engineering Optics, K. J. Habell, 136
Engineering With Rubber, Walter E. Burton, 361
Factory Law, H. Samuels, 304
Failure of Metals by Fatigue, 249
Fine Surface Finishing, Sydney F. Page, 361
Fractional Horsepower Electric Motors, A Guide to Types and Applications, E. K. Bottle, 588
Handbook of Industrial Electronic Circuits, J. Marcus and V. Zeluff, 417
Heating and Air Conditioning Equipment for Buildings, F. Burlace Turpin, 416
Highway Bridge Design, D. Y. Hill, 79
Highway Surveying and Setting Out, B. G. Manton, 361
History of Cast Iron in Architecture, J. Gloag and D. Bridgwater, 416
Industrial Accountancy, H. A. Simpson, 388
Industrial Environment and Its Control, J. M. Dallavalle, 389
Introduction to Metallic Corrosion, Ulick R. Evans, 416
Introduction to Photo-Elastic Analysis, A. W. Hendry, 249

LITERATURE (*continued*):

Reviews (*continued*):

Load Conditions of Arc and Resistance Welding Plant on Public Supply Mains, 389
Magnesium : Its Production and Use, Ernest V. Pannell, 481
Magnetic Control of Industrial Motors, G. W. Heumann, 114
Manufacture of Iron and Steel, Vol. I : Iron Production, G. Reginald Bashforth, 502
Marking-Out Practice for Mechanics, Ian Bradley and Norman F. Hallows, 443
Measurement of Stress and Strain in Solids, 639
Microwave Transmission Design Data, Theodore Moreno, 220
Motor Vehicle Technology, Part II, 389
Moulds for Plastics, W. M. Halliday, 361
Natural Durability of Timber, 417
Newcastle and Carlisle Railway, John S. MacLean, 416
Nineteenth Century Railway Carriages, Hamilton Ellis, 304
Non-Ferrous Castings, R. F. Hudson, 361
Non-Ferrous Metals and Alloys, E. Gregory and E. N. Simons, 192
Novice's Workshop, Part II, Ian Bradley and Norman Hallows, 502
Oxygen Cutting, E. Seymour Semper, 389
Photo-Elasticity, Vol. II, Max M. Frocht, 587
Photographing Machinery, Bernard Alfieri, 361
Plastics Dictionary, 270
Power System Stability, Selden B. Crary, 136
Power from the Wind, Palmer C. Putnam, 220
Practical Astronomy, G. L. Hosmer and J. M. Robbins, 417
Prestressed Concrete, Gustave Magnel, 164
Principles of Jet Propulsion and Gas Turbines, M. J. Zucrow, 80
Principles of Radar, Denis Taylor and C. H. Westcott, 220
Railway and Other Steamers, C. L. D. Duckworth and G. E. Langmuir, 305
Railway Wagon and Tank Construction and Repair, F. Ogden, 361
Road Aggregates, Their Uses and Testing, R. G. and B. H. Knight, 79
Rockets and Space Travel, Willy Ley, 388
Sawing and Planing, A. H. Haycock, 389
Semi-Fireproof Construction, H. R. Staley, 560
S.N.C.F., 1944–1948, 560
Soil Erosion : Its Prevention and Control, L. Venkatakrishnan, 333
Soil Mechanics for Civil Engineers, Bernard H. Knight, 333
Spectroscopy and Combustion Theory, 249
Standard Design of Reinforced Concrete Road Bridges, L. E. Hunter, 305
Steam Turbine Theory and Practice, William J. Kearton, 305
Story of the Bridge, F. W. Robins, 501
Symposium on Internal Stresses in Metals and Alloys, 249
Teamwork in Industry, F. J. Burns Morton, 388
Television Explained, W. E. Miller, 417
Theoretical Structural Metallurgy, A. H. Cottrell, 249
Theory and Application of Microwaves, Arthur B. Bronwell and Robert E. Beam, 114
Treatment and Disposal of Industrial Waste Waters, B. A. Southgate, 361
Twenty-Five Years : The Story of the Electricity Supply Commission, Union of South Africa, 270
Velocity Modulated Thermionic Tubes, A. H. W. Beck, 249
Waste Heat Recovery from Industrial Furnaces, 389
Watch Escapements, James C. Pellaton, 639

M

MACHINE TOOLS AND EQUIPMENT:

Automatic with a Platen Slide, Alfred Herbert, Ltd., 423
Bending Machine, Section, F. J. Edwards, Ltd., 488
British Machine Tool Industry, J. G. Lloyd, 49

MACHINE TOOLS AND EQUIPMENT (*continued*):

Drawbench, Triple, The Mint, Birmingham, Ltd., 610
Drills, Twist, Centreless Grinding Equipment for, 450
Gears, Helical, Cut on "Solid Table" Machines, S.A. Couling, 430, 580
Government Machine Tool Sales, (371), 573
Grinding Machine, Automatic Camshaft, Alfred Herbert, Ltd., 617
Grinding Machine, Bench, A. C. Wickman, Ltd., 116
Grinding Machine, Universal Cutter and Tool, A. A. Jones and Shipman, Ltd., 395
Guillotine Shear, Bronx Engineering Co., Ltd., 541
Hydraulic Presses, Parallel Development of, in the United States and Great Britain, F. H. Towler, 87
Lathe, "Flashcap," Alfred Herbert, Ltd., 699
Machine Tool Demonstration Unit, Mobile, A. C. Wickman, Ltd., 622
Machine Tool Disposals, (571)
Machine Tool Merchants, (571)
Magnetic Work Holder, Rapid Magnetting Machine Co., Ltd., 491
Metal Grinding in Factories, Regulations, 482
Micrometer, Internal, Coventry Gauge and Tool Co., Ltd., 312
Micrometer Jack, Euco Tools, Ltd., 144
Micrometers, Slip Gauges for Checking, Coventry Gauge and Tool Co., Ltd., 698
Polishing Machine Hood, Dallow Lambert and Co., Ltd., 672
Press, 50-Ton Dual Transfer, Finney Presses, Ltd., 459
Press, Hobbing, Altus Engineering Co., Ltd., 199
Press, Hot Nut, Th. Kieserling and Albrecht, 698
Press, 250-Ton Plastic, Foster Yates and Thom., Ltd., 486
Press, 40-Ton Power, Hordern, Mason and Edwards, Ltd., 459
Punch, Multiple-Turret, F. J. Edwards, Ltd., 488
Screw Pitch Checker, Coventry Gauge and Tool Co., Ltd., 698
Slitting Machines, Gang, Weybridge Jig and Tool Co., Ltd., 450
Stock Straightening Machine, Power-Driven, Rockwell Machine Tool Co., Ltd., 423
Testing Machine, 30-Ton Universal, W. and T. Avery, Ltd., 533
Toothing Machine, Saw, Turner Brothers (Birmingham), Ltd., 489
Truing Tool, Diamond, Engineering Diamonds, Ltd., (264)
War Surplus Machine Tools, A. H. Orcutt, 108
Wire Drawing Machine, Sir James Jarmer Norton and Co., Ltd., 458

METALLURGICAL TOPICS:

Ceramic Coatings for Molybdenum, 481
Chromium-Free Heat-Resisting Steels, 104
Cleavage Fractures in Mild Steel, 691
Copper and Its Alloys in Engineering and Technology, 481
Direct Hardening of Hot-Rolled Steel, 597
Ductile Titanium, 105
Effect of Hydrogen on the Ductility of Cast Steel, 329
Electroforming, 597
Form of Notch in Impact Testing, 690
Fretting Corrosion, 104
Isothermal Treatment of Low-Alloy Steels, 328
Metallurgical Research in Australia, J. Neill Greenwood, 216
Steels for Steam Pipes, 216
Temper Brittleness of Carbon Steels, 596
Titanium, 480
Yield Point of Austenitic Steels at Low Temperatures, 481

MINES AND MINING:

American Winder for Barnborough Colliery, 317
Coal Mines Locomotives General Regulations, 425
Coal Mining Industry, 314
Drop-Bottom Mine Cars, (287)
Education and Training in the Mining Industry, 258
Empire Mining and Metallurgical Congress, (175), 689
Fluorescent Lamp Fitting for Mines, (167)
French Coal Mines, Modernisation, 203, 677
French Miner's Output, 427
French Nationalised Mines, 31
Mine Car Coupling, W. G. Allen and Sons (Tipton), Ltd., 528
Miners' Bonus Claim, 230

MINES AND MINING (*continued*):

Reconstruction of the British Mining Industry, Sir Charles C. Reid and Dr. William Reid, 322
Rotary Coupling for Mine Car, W. G. Allen and Sons (Tipton), Ltd., 528
Shortage of French Miners, 175

MOTOR-CARS:

Back Axle Testing Equipment, General Electric Co., Ltd., 422
British Motor Industry, (231)
"By-Van" Delivery Vehicle, Light Delivery Vehicles, Ltd., 488
Car Radio and Non-Static Tyres, (703)
Dry Spring Shackles, Vauxhall Motors, Ltd., 364
Experimental Double-Deck Green Line Coach, 140
Fast Charging of Car Batteries, 167
French Automobile Production, 119, 571
Fuel Anti-Knock Requirements of Automobile Engines, G. G. Williams, 646
Motor-Car Exports, (651)
Motor Industry Research Association's Laboratory, 688
Motor Vehicle Assembly in Holland, (399)
Radio-Controlled Breakdown Service for Motorists, (231)

N

NUCLEAR ENERGY:

Atomic Energy Issues, 640
Lectures on Nuclear Power Problems, 33
Nuclear Energy in 1948, 9
Plutonium from Harwell's "Gleep," 261
Swedish Cyclotron with 400-Ton Magnet, 269

O

OBITUARY:

Angus, Robert L., 219
Blair, R., (515)
Bristow, Whiston Alfred, 359
Browett, A. H., (625)
Campbell, Sir Malcolm, 15
Campbell, Norman Robert, 641
Clay, Stanley Richard, 135
Clerke, A. B. H., 559
Climie, Andrew, (543)
Cohen, J. E., (543)
Cooper, A. R., 304
Davey, Norman, 667
Day, Charles, 697
Dykes, Alfred Herbert, 303
Farrell, Lionel Randolph, (625)
Hartley, Harry Sagar, 248
Harvey, E. A., (343)
Hattersley, Richard Edwin, (543)
Hay, Douglas, 247
Hibbert, G. C., (63)
Hodgkin, Charles Ernest, 276
Horsfall, William, (231)
Hughes, F. O., (703)
Kenward, L. V., (259)
Lander, C. H., 331
Lee, Percy Wilton, 667
Lyall, Ernest, 177
Macfarlane, C. B., (147)
Mackinnon, J. P., (625)
Main, Henry, 415
McMurtrie, Francis, 248
Methley, B. W., (119)
Monypenny, J. H. G., 276
Nithsdale, William, 559
Ogborn, T. W., (63)
Page, Sir Archibald, 275
Pank, A., (625)
Paxman, Edward Philip, 360
Perman, Archibald, 164
Petter, Guy Bazeley, 501
Pettitt, R. J., (483)
Porn, Marcel, 471
Purnell, Walter Henry, 107
Railton, James, 560
Rennie, John A., 248
Rowden, W. F., (371)
Ryves, Reginald Arthur, 303
Smith, A. E., (31)
Sterne, Edward T., 513
Stone, G. D., 332
Towers, H., (599)
Trevorrow, J. H. L., (399)
Waddington, F. G., (343)
Walker, W. E., (543)
Whibley, R., (677)
Woodrow, C. E., (515)

P

PUMPS:

Agricultural Pump, Mono Pumps, Ltd., 486
Circulating Pump, Small, Holden and Brooke, Ltd., 284
Concrete Pump, Blaw-Knox, Ltd., 556
High-Head Mine Pump, Lee, Howl and Co., Ltd., 336

PUMPS (*continued*):

Oil Pipe-line Pumps for Iraq, Worthington-Simpson, Ltd., 266
Peripheral Pump, Sigmund Pumps, Ltd., 526
Process Pump, Sigmund Pumps, Ltd., 526

R

RAILWAYS:

Accidents:

EASTERN AND NORTH-EASTERN REGION :

Garton Level Crossing Accident, (703)

SCOTTISH REGION :

Ardler Junction Collision Report, 93

SOUTHERN REGION :

Woolwich Railway Accident Report, (427)

General Matters:

"A.F.C.-Talgo" Train, American Car and Foundry Co., 644
All-Steel Fabricated Railway Coaches, 507
American Railway Problems, 692
Belgium Railway Restoration, 539
British Railways in 1948, 7, 36
British Railways Coal Costs, (571)
British Railways' Locomotive and Rolling Stock Programme, 573
Canadian Railway Equipment, 285
Double-Decker Train on British Railways, (257)
Drainage of Permanent Way at Hougham, 324
Electric and Diesel-Electric Traction on the Netherlands Railways, H. J. Van Leesen, 255
Exchange of Railway Personnel, (626)
Flat-Bottom Rails for British Railways, 130
French Railway Traffic Figures, 287
French Rolling Stock, 31, 203, 343, 399, 571, 703
Frequency Correction Equipment for Railway Signalling Supplies, 184
Glass Transport on British Railways, 312
Greek Railway Restoration, 569
Inspecting Officer, (259)
Italian Railway Reconstruction, 87
Level Crossings, (259)
Manila Railway Developments, (449)
New South Wales Railways, (31)
New Standard British Rail, (677)
Nigerian Railway Equipment, (543)
Northern Ireland Railway, Purchase of, (399)
Radio Tests on British Railways, 1
Railway Disputes, 676
Railway Signalling Developments, 1923–48, O. S. Nock, 518, 546, 574, 602
Review of Burma Railways, N. Johnson, 122, 150, 178, 206
Rolling Stock Standardisation on British Railways, 27
Signalling and Speed, 530
S.N.C.F. Deficit, 625
S.N.C.F. Electric Power Consumption, 119
S.N.C.F. Electrified Sections, Increase in Traffic, 543
S.N.C.F. Reconstruction Work, 63, 119
S.N.C.F. Track Renewal, 651
Snow Ploughs for British Railways, 115
Southend Pier Electric Trains, 477
Standard Signs for Station Names, (571)
Strike, Unofficial, 624, 650 ; (Leading Article, 640)
Switzerland's Ten-Year Railway Plan, 301
Track Relaying in Watford Tunnel (203)
Tyneside Trainroads of Northumberland, 301
Wage Disputes, Railwaymen's and Busmen's, 90
Wages, Railway, 62, 342, 482, 514, 598, 702

British Railways:

EASTERN AND NORTH-EASTERN REGION :

British Railways in 1948, 9
Combined Restaurant-Buffet Cars, (618)
Radio-Telephony at Whitemoor Marshalling Yard, 326
Re-signalling at Doncaster, 73
Sound Equipment at Liverpool Street Station, (484)

RAILWAYS (*continued*):

LONDON MIDLAND REGION:
- Accelerated Weathering Tests for Paints, 214, 237
- All-Steel Railway Coaches, (445), 507
- British Railways in 1948, 36
- Cylinder Liner Life, (625)
- Dynamometer Car No. 3, 594
- Glass Transport on British Railways, 312
- Old Hot Air Engine, 365
- Repairs to Roade Cutting, 169
- Rugby Locomotive Test House, 7
- Snow Ploughs for British Railways, 115

SCOTTISH REGION:
- Ardler Junction Collision Report, 93
- Braidhurst Viaduct, Motherwell, (599)
- British Railways in 1948, 36
- New Train Services, (543)
- Reorganisation, (63), (203)
- Scottish Rail Bridges, (175)

SOUTHERN REGION:
- British Railways in 1948, 37
- Combined Restaurant-Buffet Cars, (618)
- Diesel-Electric Shunting Locomotives, 623
- Electric Locomotive "No. 20,003," 280
- Electric Locomotives, (571)
- Frequency Correction Equipment for Railway Signalling Supplies, 184
- Passenger Terminal at Southampton Dock, (63)
- Track Relaying in Watford Tunnel, 203

WESTERN REGION:
- British Railways in 1948, 37
- Gas Turbine Locomotives for British Railways, 25
- Railway Truck Mover, B.S.A. Cycles, Ltd., 510

London Transport:
- Aldenham Bus Maintenance Depot, (427)
- Aluminium Alloy Trains, (91)
- British Railways in 1948, 38
- Bus Map, (175)
- Developments, 261, 309
- Experimental Double-Deck Green Line Coach, 140
- Gants Hill Station, Oliver Dawson, 234
- Garages, (371)
- Light Alloy Rolling Stock for London Transport, 103
- London Bus Strike, Unofficial, 30
- Renewal of a London Railway Bridge, 116
- Resignalling of Chesham Branch Line, (677)
- Rolling Stock Overhaul at Acton Works, 298
- Wage Disputes, Railwaymen's and Busmen's, 90
- Waterloo and Charing Cross Escalator Schemes, 361

RAILWAY ELECTRIFICATION:
- Indian Railway Electrification, (343)
- Italian Railway Electrification, (175)
- New Zealand Railway Electrification, (515)
- Paris–Lyon Railway Electrification, 371
- Railway Electrification in Spain, 253

RAILWAY LOCOMOTIVES:
- Coal Mines Locomotives General Regulations, 425
- Conversion of Locomotives from Coal to Oil Firing, 517
- C.P.R.'s Last Steam Locomotive, (455)
- Diesel-Electric Shunting Locomotives for Southern Region, 623
- Gas Turbine Locomotives for British Railways, 25
- Locomotive Comparisons, 108, 219, 248
- Locomotive Diesel Engine Manufacture in Canada, 385
- Locomotive Performance, William C. Budd, 696
- Locomotive Standardisation, 78; (Letters, 108, 135, 192, 332, 357, 387, 417, 471, 502)
- Locomotives for India, 513
- Long Non-Stop Run of Diesel Electric Locomotive "No. 10,000/1," 645
- Oil-Fired Locomotives, (625)
- Smoke Eliminator for Locomotives, Utility Construction, Ltd., 366
- S.N.C.F. Locomotives, 483
- Steam Locomotive Efficiency, E. C. Poultney, 191
- Stephenson-Crossley Diesel Shunting Locomotive, Robert Stephenson and Hawthorns, Ltd., 535

ROADS:
- American Road-Building Machinery, J. S. Wilson, 347, 374
- British Road Federation's Film, (703)
- European Highways, Development of, 345
- European Road Network, 673
- Highways in Portugal, 253
- Road Research Laboratory's Lectures, (651)
- Science Museum Road Vehicle Handbook, (651)
- Trunk Road Near Neath, Glamorgan, (231)
- Trunk Road in South Wales, 653

S

SEVEN-DAY JOURNAL:
- Agricultural Engineering Mission to Canada, 457
- Air Estimates, 233
- Air Registration Board, 601
- Aircraft Landing Aids, 679
- "Ajax," H.M.S., Disposal of, 401
- Aluminium Alloys for Marine Use, 373
- Amalgamation of B.O.A.C. and B.S.A.A., 289
- American Winder for Barnborough Colliery, 317
- Anglo-American Council on Productivity, 485
- Ardler Junction Collision Report, 93
- Association of Supervising Electrical Engineers, 373
- Austin, John, Retirement, 653
- Birthday Honours, 653
- Bramah Bicentenary Exhibition, 601
- Bristol Aircraft Accident, 517
- British Association, 401
- British Iron and Steel Research Association, 65, 205
- British Merchant Ship Replacement, 261
- British Overseas Airways Corporation, 65
- British Railways' Locomotive and Rolling Stock Programme, 573
- British Shipbuilding Research Association, 177
- British Standards Institution Dinner, 233
- British Transport Commission, Chief Research Officer, 517
- Calderwood, James, New Appointment, 93
- "Cambria," M.V., 601
- "Car Ferry," Cross-Channel Motor Vessel, 679
- "Caronia," R.M.S., at Southampton, 1
- Chamber of Shipping of the United Kingdom, 121, 233
- Chemical Engineering Research, 545
- Civil Aviation Fire School, 679
- Civil Aviation Progress, 149
- Coal Bunker Supplies and Prices, 601
- Collingham, R. H., Retirement, 1
- Combined Heat and Power Supplies, 33, 373
- Combustion Engineering Association, 261
- Concrete, Quality of, 627
- Conversion of Locomotives from Coal to Oil Firing, 517
- Corrosion of Cast Iron Pipes, 33
- Davey, Paxman and Co., Ltd., 653
- "Decoy," H.M.S. Destroyer, Launch, 373
- Defence, 1949, Statement on, 177
- Defence Services Research Facilities Committee, 121
- Diesel Engine Users' Association, 457
- Education and Training in the Steel Industry, 317
- Education and Training of Technologists, 679
- Electricity Load Spreading, 121
- Electricity Supply Statistics, 1946–7, 429
- Electromagnetic Problems, 485
- Engineering Industries Association Exhibition, 65
- Engineering Industry, Importance of, 679
- Engineering Structures, Symposium on, 429
- European Highways Development, 345
- Faraday Lecture, 177
- Faraday Medal, 65
- Farm Machinery, Decontrol of, 627
- Fedden, Sir Roy, Appointment, 1
- Festival of Britain, 1951, 121, 679
- Fire Research, 1947, 545
- Fuel Efficiency, 545
- Fulmer Research Institute, 401
- Government Machine Tool Sales, 573
- Hacking, Sir John, Visit to U.S.A., 205
- Illuminating Engineering Society, 545
- Imperial College Luncheon, 289
- Imperial Institute Report, 401
- Industrial Productivity, Committee on, 373
- Institute of Marine Engineers, 289
- Institute of Metals Award, 345
- Institute of Navigation, 149, 205
- Institute of Transport Silver Jubilee Scholarship, 93
- Institution of British Agricultural Engineers, 545
- Institution of Electrical Engineers' Annual Dinner, 233; Honorary Member, 65
- Institution of Gas Engineers, 653
- Institution of Mechanical Engineers, 261
- Institution of Naval Architects Spring Meeting, 317
- International Civil Aviation Organisation, 429
- International Tin Study Group, 653
- Iron and Steel Bill, 573
- Iron and Steel Production, 33
- James Alfred Ewing Medal, 317
- James Clayton Prize, 177
- James Watt International Medal, 65
- Kelvin Lecture, 457
- Lloyd's Register of Shipping, 317, 457
- Lockspeiser, Sir Ben, New Appointment, 177
- London Fire Brigade Developments, 93
- London Traffic, 149
- London Transport Developments, 261
- Lyall, Ernest, Obituary, 177
- "Magdalena," Royal Mail Liner, 457
- Mansion House Association on Transport, 345
- Mechanical Engineering Research Laboratory, East Kilbride, 517
- Merger of Shipping Registers, 345, 401
- Midland Coalfield, New, 573
- M.I.R.A., Proving Ground, Opening, 485
- Mond Nickel Fellowships, 345
- "More Power and What It Means," Exhibition, 429
- Mount, Sir Alan, Retirement, 627
- National Foundry College, 401
- National Smoke Abatement Society, 517
- Navy Estimates, 205
- North of Scotland Hydro-Electric Board, 627
- Nuclear Power Problems, Lectures on, 33
- Oil Shale and Cannel Coal Conference, 545
- Opencast Coal Production, 485
- "Oslofjord," Liner, Launch, 401
- Owen Falls Hydro-Electric Scheme, 177; Dam, 573
- Peacetime Use of Royal Ordnance Factories, 429
- Pedestrian Crossings, 205
- Plutonium from Harwell's "Gleep," 261
- Power Station Superintendents, Conference, 149
- Pre-Stressed Concrete, Conference on, 205
- Profit-Sharing in Co-operative Productive Societies, 121
- Radio Industry's Exports, 121
- Radio Tests on British Railways, 1
- Ross-Shire Hydro-Electric Scheme, 93
- Royal Aeronautical Society's Garden Party, 517
- Royal Institution, 261
- Royal Society's Conversazione, 601
- Ruston and Hornsby, Ltd., Appointments, 573
- Scientific Instruments of George III, 429
- Scottish Industries Exhibition, 373
- South Wales, Future Development of, 601
- South Wales, New Trunk Road, 653
- Southern Electricity Consultative Council, 233
- Speaking Traffic Signals, 33
- Status of the Engineer, 149
- Steel Allocation to Blitzed Areas, 345
- Steel Economy, 233
- Technical Scholarships and the Universities, 627
- Thames Conservancy Board, 33
- Thames Water Bus Service, 289
- Tin Research Institute Report, 627
- Trade With Canada and the U.S.A., 457, 485
- Trade Exhibition Advisory Committee, 1
- Traffic Arrangements for the 1951 Exhibition, 93
- Transport in East Africa, 33
- United Nations Scientific Conference on Resources, 289
- University of Nottingham, 485
- Uranium Deposits, Search For, 317
- Water Resources of South Africa, 1
- Windmill Generator, 100-kW, for Orkney, 457
- "World From The Air," 149
- Wright, Sir Charles, Retirement, 289

SHIPS AND SHIPBUILDING:

General:
- Admiralty Survey Ship, 137
- British Merchant Ship Replacement, 261
- Canadian Shipbuilding, 567
- Chamber of Shipping of the United Kingdom, 121, 220, 233
- Confederation of Shipbuilding and Engineering Unions, 570; Annual Meeting, 542

SHIPS AND SHIPBUILDING (*continued*):

General (*continued*):
- Decca Navigator System with Lane Identification, 101
- French Inland Water Fleet, 427
- French Trawler Construction, 543
- Irish Mail, G. W. Tripp, 432
- Launches and Trial Trips, 678
- Lloyds Register of Shipping, 317; Annual Summary, 1948, 252; Shipbuilding Returns, 73, 457
- Marine Anti-Corrosion Compositions, 167
- Marine Communication Receivers, (571)
- Marine Engineering in the Royal Navy, Eng. Vice-Admiral Sir John Kingcome, 129
- Merger of Shipping Registers, 345, 401
- Motorship for Isle of Wight Service, (703)
- Nationalisation of Shipping, 118, 598
- Northern Ireland Shipbuilding, (677)
- Radar Aids to Marine Navigation, (659)
- Radar Installations for Ships, C. G. White, 560
- Safety of Life at Sea, The 1948 International Convention for, 449
- Ship Model Testing Tank, Modernised, R. A. Johnson, 561, 578
- Shipbuilders and Steel Prices, (421)
- Shipbuilding and Marine Engineering in 1948, 22, 59, 71
- Shipbuilding Yards for Bombay, (287)
- Shipyard Steel Allocations, (287)
- Steel Supplies and the Shipbuilding Industry, 443
- Sweden's Mercantile Marine, (543)
- Swedish Oil Tanker, 253
- Swedish Ore Carrier, Reconditioning, (63)

Named Vessels:
- *Cambria*, Royal Mail Motor Vessel, 601
- *Car Ferry*, Cross-Channel Motor Vessel, 679
- *Caronia*, R.M.S., at Southampton, 1
- *Ciudad de Maracaibo*, Cargo Liner, 513
- *Magdalena*, Royal Mail Liner, 457
- *Oslofjord*, Motor Liner, Launch, 401

Naval Matters:

BRITISH AND COLONIAL:
- Developments in Our Naval Air Arm, 300
- Fluorescent Lighting for Naval Ships, (259)
- Marine Engineering in the Royal Navy, Eng. Vice-Admiral Sir John Kingcome, 111
- H.M. Cruiser "Ajax," Disposal of, 401
- H.M. Destroyer "Decoy," Launch, 373
- Naval Cold Weather Trials, 162
- Naval Construction in 1948, Francis McMurtrie, 11, 45
- Navy Estimates, 205; (Leading Article, 246)
- Navy Looks to the Future, 511
- Navy of To-day and To-morrow, 2, 34

Foreign:
- French Fleet Reconstruction, 371
- French Naval Orders, 91
- United States Navy: Its Role Under the Pact, 479

SOUTH AFRICAN ENGINEERING NOTES:
- Copper Tubes, Manufacture of, 539
- Iron, Steel, Engineering and Metallurgical Industries, 539

T

TECHNICAL REPORTS:
- Breakdown Time of Amorphous Solids, 47
- Brown Boveri Gas Turbine Installed at the Hermann Goering Steel Works, Watenstedt, 704
- Dielectric Constant and Polarisation in Ionic Crystals, 539
- Distribution of Load Along Nuts, with Particular Reference to Heavy Loads, 593
- Effects of Electrolysis upon the Strength of Reinforced Concrete, 170
- Expansion of Boiler Tubes into Tube Plates, 593
- Fatigue of Bolts and Studs Under Combined Bending and Tension, 593
- House Construction, 397
- Initiation of Long Electrical Discharges.—11: Charging Currents, 47
- Interim Measure for the Prevention of Dazzle on Roads, 357
- Magnetisation Curves for Ferro-Magnetic Single Crystals, 276
- Polarisation of Dielectrics by Slow Particles, 170

TECHNICAL REPORTS (*continued*):
Preservation of Mine Timber, 704
Preasboard Under Compression, Behaviour of, 276
Recording of Impulse Voltages: Theoretical and Experimental Investigation of Sources of Errors Introduced by the Measuring Circuit, 47
Short-Time Phenomena in the Iron Welding Arc.—11: Metal Bridging and Short Circuiting of the Arc, 478
Soil Foundation on Road Surfaces, Effect of, 397
Strength of Light Alloy Struts, 344
Structure and Dielectric Properties of Barium Titanate and Similar Compounds, 47
Synthetic Mica, 539
Types of Road Surfacing and Maintenance, Using Tar or Asphaltic Bitumen, 344

TELEGRAPHY AND TELEPHONY:
Radio-Telephone for Taxi-Cab Fleet, (371)
Radio-Telephony at Whitemoor Marshalling Yard, 326

TELEGRAPHY AND TELEPHONY (*continued*):
Single Side-Band Radio-Telephony in the "Caronia," 145
Telecommunication for Canadian Mines, 421

TUNNELS:
Tunnel at Woodhead, 252

W

WATER SUPPLY:
Cartagena Aqueduct, Spain, 253
Chlorination of Water Supplies, 225
Filettole–Livorno Aqueduct, Italy, 648
Frankley Waterworks, Birmingham, 215
Gas Turbines for the M.W.B. Ashford Common Pumping Station, 337
Reinforced Concrete Reservoir at Orleans, 437
Water Pollution, 308
Water Resources of South Africa, 1
Water Supplies in East Africa, (91)
Water Supply for Port Elizabeth, 684

WELDING:
Works in Progress and Constructed During 1948, Metropolitan Water Board, 83
All-Welded Girders, 144
Conference on Welding, 226
Petrol-Electric Arc Welder, Lincoln Electric Co., Ltd., 254
Spot Welding Machine, "S.A.T. 75," Three-Phase, Sciaky Electric Welding Machines, Ltd., 524
Welded Joints in Structural Steelwork, (651)
Welded Viaduct in Sweden, 469
Welding Abstracts, (335)
Welding Equipment, 175A Transformer, Murex Welding Processes, Ltd., 491

WIRELESS:
Climatic and Durability Tests for Radio Components, 393
Decca Navigator System with Lane Identification, 101
Equipment for Synchronising Italian Broadcast Transmitters, (638)
Jubilee of Pioneer Radio Factory, 133
London–Birmingham Television Link, (515)

WIRELESS (*continued*):
Micro-Wave Radio Link for Television Outside Broadcasts, 471
Radar Aids to Marine Navigation, (659)
Radar Equipment on M.V. "Munster," (63)
Radio-Controlled Breakdown Service for Motorists, (231)
Radio Industry's Exports, 121
Radio-Telephone for Taxi-Cab Fleet, (371)
Radio-Telephony at Whitemoor Marshalling Yard, 326
Radio Tests on British Railways, 1
Rugby Radio Station, (473)
Single Side-Band Radio-Telephony in the "Caronia," 145
Sound Broadcast Equipment in the Newspaper Industry, (696)
Television in Belgium and Holland, (315)
Television Camera, Marconi's Wireless Telegraph Co., Ltd., 526
Television Control Centre Equipment, Marconi's Wireless Telegraph Co., Ltd., 526
Third Programme Transmitting Station, (35)
Transmitter at Hornby, Canada, 337

Subjects—Miscellaneous

A

ADMINISTRATION of Nationalised Industries, 174
A.E.U. National Committee, 702
Aids to Production, 570
Aluminium Alloys for Marine Use, 373
Aluminium Plant Surveys, 28
Amalgamated Union of Foundry Workers, 702
American Management Techniques, 286
Anglo-American Productivity Council, 103, 202, 230, 485; (Leading Article, 500)
Anti-Dazzle Regulation, (31)
Antwerp Oil Refinery, (31)
Apprenticeship Scheme, Plessey Co., Ltd., 145
Aquila Oil Refinery, Trieste, (555)
Australian Briqueting Plant, 284
Australian Paper Mills, (427)
Automatic Synchronous Clock and Time Control, 566
Average Weekly Earnings and Hours, 398

B

BELGIUM'S Industrial Recovery, 230
Blackpool and Paddington, 666
Blast-Furnace Blowers for Rotherham, 469
Blasting Regulations, 342
Brazil, Development in, (153)
Breathing, Reviving and Rescue Apparatus, 202
Britain's Economy, Marshall Aid and American Imports, 78
Britain's Energy, E. F. R. Townshend, 357, 531; P. Schiller, 443
Britain's Energy—A New Conception, Sir Claude Gibb, 137, 152
Britain's Exports, 454
British Council's Engineering Panel, 252
British Industry, Future of, 650
Bronze Bars, Machined Standard, (315)
Budget, The, 413; (Leading Article, 414)
Building Material, 253
Building Research, 1946, (315)
Building Research and Development, 471

C

CALENDARS and Diaries, (32)
Canadian Haulageway Project, 513
Canadian Hydro-Electric Power Projects, 513
Canadian Pipe and Rockwool Factory, 369
Canadian Research, 285
Canadian Rod Mill, 513
Catalogues, 148, 176, 201, 400, 428, 484, 516, 544, 572
Cellophane Plant Extensions, 28
Cement, Economy in the Use of, (543)
Cement, Portland, Production, 119
Census of Distribution, (203)
Ceramic Coatings for Molybdenum, 481
Ceramic Hood "Argonarc" Torch, British Oxygen Co., Ltd., 487
Chemical Engineering Research, 545
Chemicals from Petroleum, Plant for Producing, 188
Chemistry of Heavy Elements, (259)
Church and Mechanical Engineering, 246; (Letter, 276)
Civil Engineering in 1948, 19, 50
Civil Engineering Structures in Spain, 297
Civil Service Engineers, 302; (Letters, 333, 387)
Clock and Carillon at Bradford Town Hall, T. R. Robinson, 182
Combined Heat and Power Supplies, 33
Compressed Air Unloading Devices, Lacy-Hulbert and Co., Ltd., 283
Concert Hall for South Bank, 512
Congo River Widening, (63)
Consistency of Timing Obtained with Heavy Trigger-Released Mechanisms, L. Gosland and A. A. Hudon, 376
Consulting Etiquette, 586
Contractors' Plant (Returns) Order, (175)
Contracts, 64, 92, 119, 204, 259, 372, 400, 516, 544, 600, 626, 652 678, 704
Copper and its Alloys in Engineering and Technology, 481
Copper, Lead and Zinc, 570
Copper, Tin and Zinc, (642)
Corrosion of Cast Iron Pipes, 33
Crane, 150-Ton Floating, Cowans, Sheldon and Co., Ltd., 193
Crane, 3-Ton Mobile, Stanhay (Ashford), Ltd., 459
Crusher, "Flexitooth," British Jeffrey-Diamond, Ltd., 462
"Cutogen" Hand Cutter, British Oxygen Co., Ltd., 487
Cylinder Liner Life, (625)

D

DECCA Navigator Chain for Oil Survey, (287)
Defence, 1949, 177, 218
Defence Services Research Facilities Committee, 121
Defence, The Business of, 358
Dirt in Lubricants, D. Clayton, 136
Disputes, Industrial, 118
Disputes, Trade, 30, 174, 286, 398, 514, 624
Dollar Exports Board, 666
Dry Spring Shackles, Vauxhall Motors, Ltd., 364
Ductile Titanium, 105
Dumper, ½ Cubic Yard, Aveling-Barford, Ltd., 491
Dumper, 10-Cwt, George Fowell, Ltd., 567
Duties and Responsibilities, 614

E

ECONOMIC Planning Board, 146
Economic Progress in 1948, 86
Economic Survey for 1949, 301; (Leading Article, 330)
Education of Technicians, 274
Education and Training of Technologists, 679
Electroforming, 597
Empire Mining and Metallurgical Congress, (175), 689
Employers' Liability in 1949, Sir William Ball, 418; (Letter, 618)
Employment and Unemployment, 90, 202, 314, 426, 570, 702
Emulsifying Machine, High-Speed, Watten Emulsifying Machines, Ltd., 157
Engineering Industry and the Budget, 62
Engineering Industry and German Competition, 174
Engineering Industry, The Importance of, 679
Engineering-Legal Society, 90
Engineering Structures, Symposium on, 429
Engineering Student Training, (343)
Engineering Unions and Productivity, 62
Evaporator, Continuous Rotary, J. Bibby and Sons, Ltd., 311
Excavator Bucket, Marion Steam Shovel Co., 312
Excavator Crane, Mobile, Thomas Smith and Sons (Rodley), Ltd., 489
Export Drive to North America, 454
Export Forms, 202
Export Prices, 624
Export Targets, 258
Exports and Industrial Production, 314
Exports in January, 202
Extraction Metallurgy, Nuffield Fellowship in, (119)

F

FACTORY Construction in Canada, 273
Factory Inspector's Report, 258
Fan, 9in Propeller, General Electric Co., Ltd., 171
Fire Research, 1947, 545
Flexible Couplings, Small, J. H. Fenner and Co., Ltd., (203)
Flow Meter, Liquid, Rotameter Manufacturing Co., Ltd., 384
Fluid Mixing Unit, Slack and Parr, Ltd., 524
Foreign Engineers' Tour of Scotland, (652)
Foreman and Work Measurement, 702
Foreman's Task in "Man-Management," 342
Forging Hammers, Vibration Controlled Foundations for, Rolt Hammond, 551
Fork Lift Truck, Electrically Operated, I.T.D., Ltd., 490
Form of Notch in Impact Testing, 690
Foundry Conditions, 454
Foundry Foremen's Training Course, 426
French Central Hydraulic Laboratory, 665
French Foundry Products, 259
French Light Sheet Metal Allocations, 483
French Modernisation and Equipment Plan, 147, 625
French Oil Refining Capacity, 91
French Oil Research, 315
French Sheet Metal Allocation, 625
Fretting Corrosion, 104
Fuel Economy and Production Efficiency, 166
Fuel Efficiency, 545
Fuel Utilisation, C. T. Allan, 131
Furnace, Box-Type Cyclone, Electric Furnace Co., Ltd., 492
Furnace, Rotary Gas Carbonising, Birlec, Ltd., 458
Furnace, Toolroom Tempering, Wild-Barfield Electric Furnaces, Ltd., 461
Future of Structural Engineering, G. A. Gardner, 192

G

GAMMA Rays for Industry, (483), (677)
Gas-Fired Immersion Heating and Galvanising Bath, British Gas Council, 493
Gas Industry, Future of, 370
Gear Trains, Epicyclic, R. H. Macmillan, 318
Gearing, Trends in, Harry Walker, 290
Gears, Spiral Bevel, The Overlap Ratio of, Ewen M'Ewen, 351
Geiger Counters, Lightweight, 701
German Competition, 190
German and Japanese Industry, Reports on, 316, 344, 428, 456, 484, 516, 544, 572, 600, 626, 652, 704
German Trade Talks, 314
Girder Clip, Adjustable, Rawlplug Co., Ltd., 487
Giving the "Guv'nor" a Big Hand, 470
Glass Transport on British Railways, 312
Government Bulk Buying, 624
Government and Industry, 230
Government Science, 616
Graphics of Pulsating Stresses, G. G. McDonald, 154
Ground Sulphur Price Reduction, (645)

H

HAND-OPERATED Lifting Truck, Power Jacks, Ltd., 338
Havre–Paris Pipe-Line, 483
Hidden Employment in the Engineering Industry, 482
"Hidden Unemployment" in the Engineering Industry, 702
High-Temperature Insulating Material, Gyproc Products, Ltd., 29
Honours, Birthday, 653
Honours, New Year, 28
Hydraulic Elevator Fish Pass, 354
Hydraulic Pressure Gauge, Sperry Gyroscope Co., Ltd., 382
Hydraulic Works in Turkey, 593

I

I.C.I. and Nationalisation, 650
Incentives for Management, 398
Industrial Building, 514, 624
Industrial Management, Survey of, 62
Industrial Outlook, 174
Industrial Production, 30, 118, 370, 514, 624, 650
Industrial Productivity, Committee on, 373
Industrial Rehabilitation, 426
Industrial Safety, 598
Industry and Employment in Scotland, 542
Industry, Engineers, and Architects, 330
Industry and the Profits Tax, 90
International Antarctic Expedition, 367
International Book Coupon Scheme, (427)

International Conference of Engineering Societies, 47
International Engineering Collaboration, 48; (Letter, 163)
International Labour Organisation, 676
Invention and Sifting Out Engineering Facts, E. G. Bailey, 472, 498
Ionospheric Station on Deception Island, (343)

J

JOHANNESBURG'S New Gasholder, (315)

L

LABOUR in 1948, Gertrude Williams, 5, 54
Lead Prices, 30
Lead Sheet and Pipe, (63), (625)
Lettering and Drawing Guide, Hall, Harding, Ltd. (380)
Lightweight Factory Truck, Vulcanised Fibre, Ltd., 145
Limitation of Dividends, 258
Loader, Muir-Hill, E. Boydell and Co., Ltd., 460
London Fire Brigade Developments, 93
London Traffic, 149

M

MAGNETIC Escapements for Pendulum Clocks, 116
Magnetic Tape Recorder, 313
Management for Production, 482
Manpower and Industrial Production, 370
Manpower Statistics, 286
Mansion House Association on Transport, 345
Mechanical Engineering Research Laboratory, East Kilbride, 517
Mechanical Equipment in the Building Industry, (689)
Mechanical Seals for Refrigeration Compressors, (147)
Meehanite Metal, Meeting High-Performance Demands in Engineering Construction with, A. Campion, 243
Merseyside Development Area, (163)
Metal Prices, 398
Metallurgical Research in Australia, J. Neill Greenwood, 216
Military College of Science, 211
Mill Roller, Trouble with, A. E. Warnock, 696
Ministry of Supply Tour of the South West, 419
Mission to Canada, 190
Mixer, Foster, Yates and Thom, Ltd., 486
Monnet Plan, 175, 203, 231
Monopolies and Restrictive Practices Commission, 62, 286
Morocco, Industrial Development of, 231, 259
Motherwell, New Factory, Metropolitan-Vickers Electrical Co., Ltd., 607

N

NATIONAL Foundry College, Annual Report, 401
National Industrial Safety Conference, 258
National Joint Advisory Council, 146, 514
National Physical Laboratory, 606
National Production Advisory Council, 202
Nationalisation and Initiative, 454
Need for Incentives, 285
Non-Ferrous Metals, 454, 676
Northern Ireland, New Factories, (371)
Northern Ireland Transport, (259), (343)
Northern Rhodesia, Hydrographic Survey, (625)

O

OIL Consumers Council, 164
Oil and Pipe-Lines, 567
Oil Recovery by "Fluidisation," 513
Oil Refinery at Fawley, (651), 667
Oil Refinery at Gothenburg, (343)
Oil Seam in the Herault, 399
Oil Town in Borneo, 89
On Observation, 442
Open-Hearth Furnaces for a Steel and Tube Works, Stewarts and Lloyds, Ltd., 139
Overseas Trade, British, Statistics, 118, 230, 342, 482, 598, 676
"Oxford" Management Conference, 230

P

PAINT Economy Memorandum, (119)
Paint Spray Booth, Alfred Bullows and Sons, Ltd., 461
Paint, The Influence of, 442, (543)
Paints, Accelerated Weathering Tests for, 214, 237
Palm Oil Mills in Nigeria, (371)
Patent Changes, 358
Patents Bill, 362
Peacetime Use of Royal Ordnance Factories, 429
Pedestrian Crossings, 205
Personal Incomes, Costs and Prices, 514
Personnel Management and Works Managers, Letters, (50, 80, 107, 163)
Pickling Machine, Coiled Strip, John Thompson (Dudley), Ltd., 529
Pipe Line Between Le Havre and Paris, 315
Pipe Line Support, Vokes, Ltd., 460
Plant Replacement and the Budget, 118
Plastic Board Plant, 28
Plastics, Film (415)
Policy for Industry, 570
Politics, Trade Unions and Work, W. Howes, 220
Powder Metallurgy in Germany, (599), (625)
Powder Metallurgy and Heat-Resisting Alloys, H. W. Greenwood, 349
Pressure Gauge Calibrator, Portable, Barnet Instruments, Ltd., 672
Pressure Gauge, Electronic, H. A. Prime, and T. J. Chi, 320
Primary Inventions, 470
Production Problems, 90
Production and "Thwarted Enterprise," 118
Productivity, Cecil Bentham, 379
Productivity and the Re-Equipment of Industry, 146
Productivity and Sales Management, 146
Professional Engineers Appointments Bureau, 279
Profit-Sharing in Co-operative Productive Societies, 121
Protective Coating, Clear Glass Products, Ltd., (427)
Protective Metal Coatings, (315)
Pulp and Paper, 285

Q

QUARRYING at Berry Head, (703)

R

RAW Materials of the Highlands, 381
Rayon Pulp, International Paper Co., 513
Reconstruction in Norway, 253
Refractories, Conference on, (315)
Regional Boards for Industry, 62
Research on Electroplated Nickel, (181)
Research Laboratory for Refractories, General Refractories, Ltd., 554
Resilient Tramcar Wheels, 367
Resources, United Nations Scientific Conference on, 289
Responsibility for Increased Productivity, 230
River Navigation in the Sudan Since 1898, W. Scott Hill, 654, 680
Riverlake Belt Conveyor, 395
River Wall for Thames South Bank, (31)
Road Passenger Transport Services, (399)
Role of Free Enterprise, 202
Rotary Bellows Seal, British American Research, Ltd., 385
Rotterdam, Holland, Restoration, 539
Rough Copper Price, (515)
Royal Ordnance Factories, 30
Rubber Study Group, (455)

S

ST. LAWRENCE Report, 338
Sales Management, Examinations in, (119)
Salt Deposits in Sweden, (301)
Sand Cleaning Unit, Pneulec, Ltd., 525
School for Distributors' Service Engineers, 144
Screen, "Ty-Rock," International Combustion, Ltd., 529
Seals, Hydraulic, T. E. Beacham, 228
Seals, Oil, C. R. Dibben, 357, 417
Seals, Reciprocating, F. H. Towler, 229
Seals, Rotary Oil, Overheating in, B. Cooke, 223
Seals, Rotary, Oscillating and Reciprocating, 221
Seizure of Metals, F. P. Bowden and D. Tabor, 395
Silicone Rubber, (507)
Sintering Unit, High Temperature, Electric Furnace Co., Ltd., 492
Soil Mechanics, International Society of, (254)
South African Copper Tube Manufacture, 539
South Bank Thames River Wall, 85, (625)
South Wales, Future Development of, 601
Speaking Traffic Signals, Speaking Signals, Ltd., 33
Square Dial Instruments for Flush Panel Mounting, Ferranti, Ltd., 171
Stabilising System for Electric Machines, 168
Standardisation of Roller Bearings, (625)
Status of the Engineer, 149, 219, 276, 417, 471, 502
Status of the Foreman, I. A. Currey, 50
Strikes, French, 31
Strip Annealing Plant, Continuous, Incandescent Heat Co., Ltd., 486
Strip-Wound Pressure Vessels, 155
Sulphuric Acid Project, 513
Synchronous Process Timer, Londex Ltd., 253

T

TAX Relief for Temporary Commercial Premises, 30
Taxation and Incentive, 454
Taxation and the Shortage of Industrial Capital, 27
Technical Education Plans, (455)
Technical Films, Allis-Chalmers Manufacturing Co., (145)
Technical Museum for Birmingham, (175)
Technical Scholarships and the Universities, 627
Thames Conservancy Board, 33
Thames Estuary, Survey of, 642
Thames, Increasing the Flow of, 614
Thames Water Bus Service, 289
Theses, A. W. Crampton, 136
Tidal Flap Valve, Ismalia Valve Co., Ltd., 115
Tidal Power and the Severn Barrage, H. Headland, 141, 171
Titanium, 480
Titanium Ore Project, 285
Toil, C. J. Potts, 49
Trade with Canada and the U.S.A., 457, 485, 676
Trade Exhibition Advisory Committee, 1
Trade with Finland, 146
Trade with Germany, 370
Trade Unions and the Nationalised Industries, 370
Traffic Arrangements for the 1951 Exhibition, 93
Traffic Survey in Central London, 420
Training of Apprentices, 342
Training Scheme for Foremen, 161
Training of Technicians, A. P. M. Fleming, 333
Transport in East Africa, 33
T.U.C. and the Budget, 454
T.U.C. and Nationalisation, 258
T.U.C. and Price Control, 514
Tungsten Carbide Glass Cutter, Euco Tools, Ltd., (89)
Tyre Manufacture in 1948, (203)

U

UNION Officials and Time and Motion Study, 370
United Kingdom Engineering Mission to Canada, 164
Uranium Deposits, Search for, 317
U.S. Defence Preparations, 593
Using What is Known, W. A. Tuplin, 179

V

VEHICLE-ACTUATED Traffic Signals at "Bank Complex," (543)

W

WAGE Rates, Changes in, 30, 174, 286, 426
Wages in the Engineering Industry, 598
Wages and Prices, 370
Wages, Road Passenger Transport, 258
Wages and Working Hours, 426
Washing Machines, British, (371)
Waste Disposal at Sea, (453)
Waste Paper Salvage, (86)
Water Treatment Plant for a Paper Mill, Pulsometer Engineering Co., Ltd., 199
Water Wash Spray Booth, Alfred Bullows and Sons, Ltd., 461
Weighing Machine, Automatic, Industrial Products (Speco), Ltd., 525
"What the T.U.C. is Doing," 426
Wiped Joints for Aluminium-Sheathed Cables, Johnson and Phillips, Ltd., 102
Workers and the Nationalised Industries, 624
Workmen's Compensation, 174
World Conference on Road Transport, (541)
World Power Conference, (571)

Figures in Brackets ( ) refer to paragraphs

PRINTED IN GREAT BRITAIN BY GEORGE REVEIRS, LIMITED, 10 AND 12, ROSEBERY AVENUE, LONDON, E.C.1, AND PUBLISHED BY THE PROPRIETORS, MORGAN BROTHERS (PUBLISHERS), LIMITED, 28, ESSEX STREET, STRAND, IN THE PARISH OF ST. CLEMENT DANES, IN THE COUNTY OF MIDDLESEX.